

Biol 213 Genetics Fall 2000
Responses to Exit Questionnaire

1a Order

A.VAdv: 10 B.Adv: 43 C.Neutral: 14 D.Disadv: 2

2a Topics-good

A.ProteinStruct: 6 B.DNAStruct: 11 C.DNAReplic: 12 D.GenCode: 19
 E.Mendelian: 25 F.Probability: 6 G.Chi-Sq: 1 H.Pedigrees: 35
 I.NonMendel: 9 J.Linkage: 23 K.Lac: 24 L.EukGen: 13
 M.FlyDev: 10 O.Mutation: 22 P.Cancer: 45 Q.PopGen: 28

2b Topics-necessary

A.ProteinStruct: 14 B.DNAStruct: 9 C.DNAReplic: 12 D.GenCode: 8
 E.Mendelian: 9 F.Probability: 20 G.Chi-Sq: 22 H.Pedigrees: 9
 I.NonMendel: 7 J.Linkage: 13 K.Lac: 21 L.EukGen: 15
 M.FlyDev: 14 O.Mutation: 11 P.Cancer: 5 Q.PopGen: 5

2c Topics-bad

A.ProteinStruct: 10 B.DNAStruct: 4 C.DNAReplic: 2 D.GenCode: 1
 E.Mendelian: 2 F.Probability: 5 G.Chi-Sq: 11 H.Pedigrees: 2
 I.NonMendel: 2 J.Linkage: 1 K.Lac: 4 L.EukGen: 3
 M.FlyDev: 13 O.: 0 P.Cancer: 1 Q.PopGen: 4

3a Workload

A.Excessive: 29 B.BitHeavy: 29 C.Neutral: 10

3b Workload-WhyTooMuch

A.concepts: 17 B.problems: 23 C.other: 11 D.NA: 8

4a Textbook

A.VAdv: 12 B.Adv: 39 C.Neutral: 18 D.Disadv: 1

5a WebNotes

A.VAdv: 41 B.Adv: 21 C.Neutral: 5 D.Disadv: 1

6a Home page

A.VMuch: 24 B.Yes: 36 C.Neutral: 8 D.No: 1

6b Course-at-glance

A.Often: 15 B.>1: 42 C.>1: 3 D.No visit: 6 E.Other: 1

6c FAQ

A.Often: 1 B.>1: 39 C.>1: 8 D.No visit: 21

6d BullBoard

A.Often: 4 B.>1: 5 C.>1: 7 D.No visit: 50 E.Other: 3

6e Links

A.Often: 4 B.>1: 19 C.>1: 3 D.No visit: 42 E.Other: 1

6f Poetry

A.Often: 1 B.>1: 7 C.>1: 15 D.No visit: 45 E.Other: 1

7a WebBenefit

A.VAdv: 32 B.Adv: 32 C.Neutral: 4 D.Disadv: 1

8a ProbSolving

A.VMuch: 49 B.Some: 17 C.Neutral: 1 D.NotAtAll:

9a ProblemSession

A.VUseful: 22 B.Useful: 30 C.Neutral: 6 D.NVUseful: 6 E.Useless: 5

9b Focus

A.VAdv: 16 B.Adv: 30 C.Neutral: 17 D.Disadv: 4 E.VDisadv: 1

9c ProblemHelp

A.Very: 15 B.Yes: 34 C.Neutral: 13 D.No: 6 E.: 0

10a Quizzes

A.VUseful: 16 B.Useful: 25 C.Neutral: 9 D.NVUseful: 17

11a NonProbDays

A.VUseful: 13 B.Useful: 41 C.Neutral: 12 D.NVUseful: 2

11b CallOnIndividuals

A.Excellent: 17 B.Good: 29 C.Neutral: 16 D.NotGood: 5 E.Horrible: 1

11c Discussion

A.VUseful: 19 B.Useful: 28 C.Neutral: 15 D.NVUseful: 5

11d Class

A.VUseful: 25 B.Useful: 26 C.Neutral: 13 D.NVUseful: 1 E.Useless: 1

11e ClassSize

A.18: 20 B.30: 30 C.50: 6 D.Doesn'tMatter: 12

12a ProblemSets

A.Very: 36 B.Yes: 23 C.Neutral: 5 D.No: 2 E.NotAtAll: 1

12b Enjoyable

A.Very: 7 B.Yes: 20 C.Neutral: 15 D.No: 15 E.NotAtAll: 10

13a OfficeHoursEnough?

A.Very: 21 B.Yes: 29 C.Neutral: 14 D.No: 3

13b OfficeHours-Why?

A.SpecificQ:48 B Confirmation:26 C.GainFromOthers:36 D.Lost:18 E.Habit: 2

14a GarrettVisits

A.Never: 43 B.1-time: 7 C.2-3-times: 6 D.: 0 E.: 0

14b GarrettHelp

A.VHelpful: 6 B.Helpful: 5 C.Neutral: 7 D.NVHelpful: 2

14c JenniferVisits

A.Never: 43 B.1-time: 9 C.2-3-times: 4 D.: 0 E.>6-times: 1

14d JenniferHelp

A.VHelpful: 3 B.Helpful: 8 C.Neutral: 8 D.NVHelpful: 2

14e KarenVisits

A.Never: 36 B.1-time: 9 C.2-3-times: 5 D.4-6-times: 1 E.>6-times: 2

14f KarenHelp

A.VHelpful: 10 B.Helpful: 6 C.Neutral: 6

15 ProblemSet/Exam

A.Very: 37 B.Yes: 21 C.Neutral: 6 D.No: 2

16a FewerQuestions

A.Very: 7 B.Yes: 21 C.Neutral: 11 D.No: 26 E.NotAtAll: 3

16b ImprovePreparation

A.Very: 3 B.Yes: 15 C.Neutral: 18 D.No: 28 E.NotAtAll: 5

16c TimedExams

A.Very: 3 B.Yes: 8 C.Neutral: 9 D.No: 24 E.NotAtAll: 24

17a LookedAtResponses

A.Very: 6 B.Yes: 36 C.Neutral: 5 D.No: 17 E.NotAtAll: 4

17b ResponsesHelpful

A.Very: 3 B.Yes: 26 C.Neutral: 13 D.No: 10 E.NotAtAll: 2

18a HelpOnHowToFind

A.Very: 11 B.Yes: 40 C.Neutral: 7 D.No: 8 E.NotAtAll: 1

18b HowFindArticle

A.Computer-personal: 23 B.Computer-general: 21 C.TableOfContents: 17
D.Reference: 2 E.Other: 4

18c SampleSummaries

A.Very: 26 B.Yes: 37 C.Neutral: 1 D.No: 2

18d HelpHowToWrite

A.Very: 11 B.Yes: 29 C.Neutral: 12 D.No: 11 E.NotAtAll: 4

18e Summaries

A.VSatisfying: 4 B.Satisfying: 22 C.Neutral: 20 D.Unsatisfying: 14
E.VUnsatisfying: 7

19a Expts useful

A.Very: 23 B.Yes: 34 C.Neutral: 10 D.No: 1

19b LacRegulationUseful

A.Very: 17 B.Yes: 34 C.Neutral: 10 D.No: 7

19c DistinguishConclusions

A.Very: 16 B.Yes: 41 C.Neutral: 7 D.No: 4

19d Expts

A.VSatisfying: 13 B.Satisfying: 40 C.Neutral: 10 D.Unsatisfying: 5

20 Good experiments

a.SerialDilution: 11
b.DNA: 18
c.Flies: 36
d.PCFly: 17
e.Recomb: 46
f.Lac: 46
g.Agro: 22

21 Bad experiments

a.Serial Dilution: 23
b.DNA: 7
c.Flies: 22
d.PCFly: 19
e.Recomb: 3
f.Lac: 4
g.Agro: 20

22a LabConnection

A.Very: 32 B.Yes: 29 C.Neutral: 6 D.No: 1

22b ConnectionLab2

A.Very: 12 B.Yes: 39 C.Neutral: 12 D.No: 5

23a FirstLab

A.Very: 20 B.Yes: 31 C.Neutral: 8 D.No: 8 E.NotAtAll: 1

23b WriteReports

A.Very: 16 B.Yes: 43 C.Neutral: 8 D.No: 1 E.: 0

24a LabQuizzes

A.Very: 11 B.Yes: 31 C.Neutral: 15 D.No: 9 E.NotAtAll: 2

24b FeltPreparedForLab

A.Very: 6 B.Yes: 17 C.Neutral: 22 D.No: 20 E.NotAtAll: 3

25a ManualFormat

A.Very: 26 B.Yes: 32 C.Neutral: 7 D.No: 2 E.: 0

25b ManualContent

A.Very: 26 B.Yes: 35 C.Neutral: 4 D.No: 1 E.: 0

26a LabWork

A.Excessive: 29 B.BitHeavy: 27 C.Neutral: 12

26b LabWriting

A.Excessive: 41 B.BitHeavy: 23 C.Neutral: 3

27 LabInstructor

A.Brad: 14 B.Jeff: 12 C.Paula:

28a TeamTeaching

A.Very: 18 B.Yes: 31 C.Neutral: 13 D.No: 3 E.NotAtAll: 2

1b. Order

- at the time, it seemed somewhat confusing, but looking back at things I think this was a good approach
- This approach made the material challenging from the start, but worked out in the long run because we kept building upon our knowledge all year. The topics we were introduced to at the beginning of the year were better understood as the year went on.
- i thought it was good to understand what exactly genes do and how exactly genes effect phenotypes through protiens. This did help in the understanding of Mendelian gnetics, plus mendelian genetics is something we have all heard before...so it was nothing new and a good break from new stuff.
- it was somewhat more difficult beginning the year with stuff that most of us had very littl eknowledge of, but i think it worked well because what we learned those first few weeks helped with understanding the rest of the smester
- The order of topics helped in my understanding. It was beneficial to me. Thanks.
- the order of the course was beneficial to our deeper understanding of the significance and changes that have happened with mendelian genetics.
- i thought it could have gone either way
- Sometimes it was confusing because it felt like we learned something and then when more was added on-it was hard to understand what was going on
- mendelian genetics did make more sense after doing some of the molecular stuff
- I think that sometimes it is better to look at the big picture and this zoom in. I think that i woul dhave been able to gain more if the class was set up like that.
- It helped to understand the most important aspects of the course more clearly.
- By understanding how genes were transcribed and translated from DNA, to RNA, to proteins, made the concepts of Mendelian genetics much more logical.
- I thought the changes from the order in the textbook made things flow more smoothly and made the concepts easier to comprehend.
- I think it makes logical sense.
- References were made to Mendelian Genetics before we learned it in some of the earlier units of the course, but other than that the order was well picked and made the subjects easy to learn.
- I thought the structure of the class was well planned out and organized.
- understanding things on a molecular level and moving on the the larger scale makes material much easier to understand/.
- I think the order was good, not so much because of how you were describing it, but because I think the four units were very different - abstract then concrete kind of, so if the first was really hard, the second was easier, and vv. I think that helped lessen some of the stress associated with this class.
- I believe that lof of information of regulation and transcription factors could have been included with the first exam material. it worked so closely with that and would have inhanced that information

- by the time I got to the end of the course - I felt like everything was much easier to understand. I think that the order was overall a good choice.
- I think that it was more beneficial to learn about genetics on the molecular level first. It gave a foundation for learning about macro-level concepts.
- the information would have been difficult either way...
- I think it was important for us to understand genetics on the molecular level and gradually build up to the population level since we really need to have a firm grasp in molecular genetics before we can understand the concepts of molecular genetics
- I think the topics/units really flowed together well. I wouldn't change the order.
- I believe that it would have been more beneficial to do the stuff we did in the second section first and then the first and third and fourth. I just think that everyone expects the Mendel stuff first with the inheritance and so forth and it would have made more sense.
- Never having experienced the reverse, I don't think I can make a judgment call on this; at the very least, there was no apparent issue or problem with the order of material.
- Understanding the molecular basis for genetics and the relationship between DNA and protein (i.e. understanding a phenotype, such as '50% enzyme produced' as it related to alleles) was important to grasp before true Mendelian problems could be tackled. It was also beneficial because, after the first rigorous exam, Mendelian genetics was a topic that was familiar to many people (something to "fall back" onto).
- I felt like I had some background knowledge for a lot of the later topics so I think that the way the course was laid out was beneficial.
- I felt things flowed nicely together.
- Got a gist for the important concepts of genetics on the molecular level and was then able to apply this knowledge to Mendelian genetics.
- I was a little confused at first, but when I understood the relationship, it helped me understand the connections better.
- I think that if it had been taught in any other way, I would have been totally lost.

2d. Topics

- At times I really felt overwhelmed by the work load
- All topics were useful because they increased my knowledge of the subject. Some were more interesting than others, but everyone has different tastes.
- Overall I enjoyed the topics in the later part of the course more
- I really don't think that anything we did was unnecessary.
- I really found much of the information in this class interesting, though challenging. I think pretty much everything we learned related to some other topic in the class and was thus useful. Also, I think many of the topics covered could be applied to understand research and discoveries we hear about in the news and their significance to society.
- I thought all the topics were interesting and helped me gain a greater understanding of biology. They should all be kept as part of the curriculum.

- Personally, all of these topics interested (some more than others). I really enjoyed pedigrees because I felt that they could be applied to everyday life. Genetics helps to make sense of the world, and I like that.
- in the beginning everything seemed useless... actually , now it all seems very pertinent to my daily life!!!
- Still don't understand why the chi squared is valuable..it seems to be that it could be avoided at times
- I did not feel that any of the topics were useless.
- Basic genetics was most interesting to me -- probably because i understood it best. The materials of unit 3 -- regulation/lac operon were definitely more challenging and that's probably what they didn't interest me as much.
- What topics "made me a better person."??? This is a pretty bad question, how could any of these things make me a better person? I think you need to rephrase that question or get rid of it totally.
- The ones which I said still seem useless I chose more because of the depth and breadth of what I learned about them than because the topic itself is so useless; at the very least, since I will certainly not be a geneticist, the amount of analysis I would supposed to do was excessive.
- No topics really seem useless. Sure, there are some (eukaryotic regulation, dna replication) which interested me less than others, but they were all very pertinent to the subject.
- I find the most interesting parts of the course to be the causes of cancer and analysis of pedigrees.
- I am still unfamiliar with the structure of an amino acids. I feel as though some of the background info was necessary, but too much chemistry bores me. So I really didn't pay much attention to the memorized facts about it.
- Probability is something learned in so many different classes and is always preented in the same way, and i think that it is easily understood.

3c. Workload

- I felt like things were all packed into such a short time and I often couldn't my questions on one part answered before we moved on
- There were a lot of concepts--a new concept each lecture and if we didn't get it in class, there wasn't the additional class time needed during the next lecture to review or enlighten. There was a lot of material to be covered and little time for back-tracking.
- I think all the problems (PSets and study questions) were helpful but unless they were point blank facts (study questions only) thee were too many problems to do in addition to reading text and class notes and problem sets and studying for tests and lab work and other classes.
- overall
- i thought the work load was fairly heavy for this class for the sole reason that you had to teach yourself all the material before class or else you were lost since all teh topics were not covered. I spent a great deal of time every night going over teh notes to teach it to myself and went to lecture to possible beter understand certain elements that still bothered me. but lecture was fairly useless becasue you had to teach it to your self first. I thought the problem sets were good, some very hard...but fair, especially in their relation to the tests.

- i did as much work in this class (including lab) as in all my other classes combined. In the end however, i realized that now i can handle any other class and i have learned more in this class than i ever expected.
- excessive if you include lab- not including lab it was sill A LOT- i think the biggest problem was that there were too many non-starred problems on the problem sets and that the tests took FOREVER!!
- There were way too many topics for the third test. I felt extremely rushed and overwhelmed with information.
- i think we would have gained more in terms of knowledge if the focus had been less oriented to the amount of material we covered, and more oriented to a slower, more comprehensive pace. This does not mean that you can't work us hard, it just means slow down and concentrate less on the vast amounts of information, and more on the principles and knowledge.
- I felt as though my questions never really got answered. Just as I had begun to understand the current marterial, we started to learn something new. There was never a break!
- Often we only covered a topic or 2 in class, and they always seemed to be the ones I understood
- problem sets take a long time....especially when we are not sure if are doing the problems right or not.
- This class greatly exceeded my other classes in the amoout of work that was involved. In doing so this class stripped away valuble time and effort from my other classes. A.yes this class is in my major field, but no i am not a graduate or PHD student in genetics. I want to be educated but i felt that i spent this whole semester tying to understand and not feel lost.
- At the beginning of the semester, I felt that there were too many concepts for a given lecture. We always left the lecture with half of the material undiscussed. As the semester went on, we were able to cover all the material in a lecture.
- i would very much have liked to put more time into genetics because i think it both encourages discipline in self-teaching as well as interconnects with, well, everything. my schedule this semester unfortunately did not allow me to spend an excessive amount of time on this material, but i feel i still learned volumes and hope to retain some of the material and use the problem solving skills.
- It seemed like all the work came at one time, usually right before at test, and it was frustrating that we never seemed to cover the harder concepts in class. Also, I spent a lot of time outside of class just trying to figure concepts out on my own because I didn't feel that they were covered well in class. The problem sets were also heavy work and sometimes I felt that there was not enough time to get all my questions answered regarding them because a lot of times they were right before the test.
- It was a large amount of work, probably more than I have had for any other class thus far, but I had heard it would be a lot of work and expected it. I think that the concepts were very challenging, thus it took many times for me to go over them extensively before I comprehended them.
- I felt like my life revolved around only this class. i'm not sure if i liked this, eventhough i learned a lot of information and valuable skills. i think problem set days would have been more valuable if we did them as a large group in more of a lecture setting b/c my group never

did the work and all i did was give them answers. in a larger group, it would have been easier to ask questions since 3 helpers cannot be with all groups at the same time.

- I think there were too many projects going on at once. That came from both the lecture and the lab. Problem sets take a lot of time, as do daily notes. In addition, we had to prepare for labs, write lab reports, check on flies, etc. It just seemed like a lot of work for one person. I think the concepts were covered at an appropriate pace, but there were perhaps too many problems at once.
- I thought the amount of work given was very fair, but the nature of the work and the problems themselves were hard and time-consuming
- I thought the workload in this class was way beyond excessive. I think it should have been a six credit class for the amount of work we had to put into it. credit
- i feel like you guys wanted to cover too many concepts in a time period. i appreciate that you wanted to teach us as much as possible, but i feel like learning the information was rushed.
- The overall amount of concepts was not that bad, but the number of problems was excessive. I felt like no matter how much time I had, or spent, I could and should be doing more. It was extremely stressful and I felt like I was always working for this class. And, it seemed as soon as I got on top of it, you added something else, like the article summary or something.
- It was a bit heavy at times, but it really had to be in order to gain a good understanding of the subject
- I think there was just a lot to do - with having to read the book, read notes, take quiz, answer problems in notes, problem sets, (and continuing to work on that problem set throughout the week so that you understand everything), etc. Just too many little things add up to a lot.
- there just was not enough time. the material we covered in one semester i am confident could be made an entire year.
- i think the amount of work required for the class was optimal - a fair amount of reading/problems, but as little as could be expected to fully cover the large amount of material
- Sometimes the amount of problems on a problem set seemed a bit excessive. Also, sometimes the questions seemed so long that I would forget the first half by the time I got to the end.
- I think i did as much work for this course as i did for every other course i carried this semester combined. I felt like genetics was an eight credit course, however it was not. i recall earlier in the semester, when we had the fly progress report and an array of different things due, that this was the hectic portion of the semester and the end would be much easier. Once i made it to the end it was much to my dismay to once again be doing more genetics work than any other kind. I did too much work for this course, and i don't even feel like my grade will reflect it.
- it is really hard for me to separate lab from class.. but I always felt like in addition to tests I had like 8 other things to do for genetics right at the same time.. I wish it would have been more spread out
- it just never seemed like i could do all the work every night and keep up with the work in other classes. If i fell behind i felt like i was screwed in the end
- Its hard to say whether it was too many topics or problems which leads me to believe that it was both. Not that saying either was excessive, its just that when both are in surplus the total work load becomes excessive. I found that the class moved too fast. It seemed like I was

always trying to catch up, and by spending time catching up I was missing again missing the current topics. This made studying for tests more like studying for a final exam. Plus, if the majority of students spend 4 hours on a test, don't you think that is a little excessive?

- The most time consuming aspects of class were the mystery sequence projects and the tests. First, I understood how the mystery sequence project fit into each unit, but the amount of time spent on figuring out how to find open reading frames or finding an article on gene regulation (approximately six hours) was ridiculous and frustrating. Also, I think that the tests were a bit long and it's hard to concentrate for five plus hours.
- I guess just the class wasn't too much except for the article stuff which really didn't help me at all. However, concerning the lab I feel that the work was VERY EXCESSIVE everything was due at the same time and I do have other work to do besides genetics. Overall I feel that the majority of my time this semester has been spent doing something genetics based.
- It was a large workload, but it's an important course with important concepts, it's understandable
- The problems just required way too much time apiece; my group could spend an entire Monday on just a couple of problems and, depending on our luck with snagging a prof or a student helper, we could walk away still confused. There was no way to know when we had things down pat without available answers or affirmation of our work.
- I was very stressed out in this class. A yes, a huge part of that stemmed from lab, but the mystery sequence project (to prepare to supplement tests) added extra anxiety. The problem sets were definitely helpful, but I often felt I didn't have a good hold on the material covered on the last one before a new one was assigned. Sometimes all important concepts were not covered in lecture (or just briefly touched on), but we had to keep moving and I felt as if we were missing something.
- The fact that it was divided into four sections that were alone by themselves for each test is the best way to do things.
- The problem sets were sometimes a bit much. And even though having problem set days helped, I feel like a week after they were done, you should have posted answers to the questions on the net.
- Class workload was tolerable but that is not a choice to select. Thus a bit heavy was closest
- with much of the material we covered, I felt as though I was just understanding the minimum that I needed to understand. New topics were being introduced so quickly that if I didn't completely understand one, there wasn't really time to understand it because I had to learn the new ones.
- BOTH...MAINLY PROBLEMS
- I think that the amount of work required was pretty heavy, since there were a multitude of concepts to cover in-depth, but there were more problems addressing these concepts than needed.
- The problem sets were a bit much.
- At times it was intimidating to be presented with all these concepts in 12 pages of notes, AND reading AND study questions, but for the most part I thought the amount of work was reasonable.

- I thought that the workload for this class was excessive. I honestly devoted most of my time to this class, when I had 4 other classes this semester. I don't think it's fair to not include lab in his question, because lab is a huge component of the class. I think that if this class is going to be so much work, it should be worth 5 credits.
- I think that there were too many problems that weren't used. You would sit down for hours working on some of these problems and they would never ever show up again.

4b. Textbook

- it seemed alright overall, I guess. Although I never have read any other genetics books for comparison
- I read the assignments and found them helpful additions to the notes and lecture.
- I thought the textbook was good...but I must have printed out an entire textbook worth of notes on my computer this semester.
- good- but the slides and additional notes definitely helped
- The textbook was easy to understand and provided clear explanations when related to class notes.
- easy to read...not too informative though
- it was used more frequently with Brad's notes than with Jeff's because Jeff's notes were longer and went into more detail than Brad's
- easy to read
- I thought it explained stuff thoroughly and coherently
- It seemed that we did not need to know things that were in the textbook that much, and I did fine just learning from the most part of all the notes. It did not seem to impact the course that much.
- I think the textbook supplemented the notes effectively. Just reading it would have been confusing, but combined with the notes and lecture, I think it really helped.
- the text was easy to follow but I did not really feel like it helped me do the problem sets or do well on the test. I feel like I could have cut out all the text reading and still done the same on the tests.
- I don't have anything to compare it to, but it seemed to provide the information we needed in a concise way.
- Sometimes the book seemed to go into too much confusing detail, but it helped that we were given only certain pages to read--only the pages that were most applicable to the subject and easy to understand--rather than complete chapters.
- I found this to be an extremely well written textbook, and very helpful.
- helpful... but at times confusing. mainly helpful though.
- It was ok, but it was hard how we skipped around so much
- It was alright as textbooks go..nothing spectacular
- I liked the textbook a lot. I felt like it was very easy to read and easy to understand.
- I think it is a good textbook and when I needed it it worked well, but I rely more on the teachers because what they teach is going to be on the test not the material covered in the book

- good material, but definitely enhanced by the lectures
- I liked the text a lot. It had the potential to be a difficult read, but it related the concepts in a way that was very understandable.
- It was so hard because if you didn't understand something in the class and wanted to read up on it, you couldn't. If there was a text book that followed our lesson plans it would be perfect. It seemed as if the book was just used because it had to be.
- the text book helped clarify some things for me, but there was also a lot of reading that I felt did not help me at all.
- it seemed adequate
- I really enjoyed reading the textbook and how it dealt with the concepts
- I thought the textbook was easy to understand and complemented the class notes well.
- missing some of the things we talked about, but in general good and easy to understand
- A little expensive considering how much of it we actually read, but it was reasonably understandable, had good illustrations/diagrams/etc. and certainly served its purpose well.
- The textbook became more helpful after the concepts were discussed in class, but the chapters gave good background. The solved problems were definitely helpful.
- it made sense sometimes. sometimes it didn't.
- it definitely helped in providing definitions and understanding some concepts, but it didn't help at all with the application of genetics
- Didn't really back up the lectures as much as I would have liked. But in the parts that it did complement it was helpful.
- I did not use it all that often, but when I did it supplemented the material very well.
- For the most part, it was very helpful. I thought that some of the figures were a little confusing, but overall it was a very good reference.
- I think that the textbook helped very much in explaining the details of most of the concepts and calculations that we went over.

5b. WebNotes

- I thought it was helpful at times, but I had to use up all the pages on my printing account for genetics and then some, so that was a little frustrating
- The web notes allowed us to know what to expect coming into class and gave us more time to listen instead of taking notes during lecture.
- good to figure out most important info and great reference to bring to class and to study with
- they cleared up the book very well since the book could be confusing. the SQ in the notes were tough though and I thought they should have been covered more in class.
- they were very helpful. the notes usually cleared up anything I didn't understand in the text book
- a good supplement
- This aided me a lot in picking out key concepts. The quizzes were wonderful. They motivated me to keep up with reading and also pointed out areas I needed to review.
- could be more informative too

- i wish they could have been up earlier than they were, but i realize that you both have lots to do
- very easy to follow
- useful...sometimes more than other times
- The notes are a good idea... but they for the most part only posed more questions that would never be answered. A.yes, genetics is a everchanging field but there are some facts that are basic and needed to understand that an undergraduate level genetics class should have within it and not force the students to have to search for every little detail!
- worked well with your lecture style (obviously)
- Thats the primary way that I learned everything, and most of the time things were explained well. The study questions were usually good to test whether I knew something or not.
- I think the notes were extremely helpful in explaining the concepts. I liked how they were written in almost a conversational manner. It made the topics less intimidating.
- the notes were good to summarize the text and make it easier to follow. i thought sometimes they were a little too general and so seemed kind of pointless. but the study questions were very helpful to get me thinking
- These notes were easier to follow than the text book, because it was you talking to us. They were also entertaining. Sometimes the notes got to be way too long, but in general I think they helped the most when it comes to understanding the material.
- I think that the class notes were an excellent idea--they complemented the book reading well (if there was any) and were easy to follow and helpful.
- These notes made following along in class much easier. They gave us some idea of the concepts that would be discussed that day in class.
- these were great. they focused the discussion for the next day, and presented all concepts in a concise format.
- The notes were good, but didn't always explain very well, which was frustrating because then I couldn't answer the problems and got even more frustrated because there were a large number of problems I didn't understand. I wish, that maybe we had answers to the study quesitons so that if we didn't have time in class, or even just for better understanding, we could have looked at that.
- they were excellently done..worked well with the readings in the book and allowed focus on specific points in lecture
- Very helpful when going to do the problem sets...because you don't want to have to go search through the book for something you can't remember and usually a summary of what you need to know about all the important topics are in the notes.
- having them early is helpful
- helped us know what to focus on out of the readings in the book, explained concepts that may have been confusing in the book
- Getting class notes on the web was very helpful. It helped in weeding out the topics that were not really necessary to know. However, it would have been more helpful if the notes were posted in advance more often so that there would be a chance to read before the day before class.

- I thought they were great, but they weren't always posted when i wanted to do the work.
- It was good to have the really important things highlighted, and the problems to go along with it that more resembled the problems on the problem sets
- they were helpful at times, but sometimes too many questions and not enough explanations
- When notes were made with no text reading they were fine. When the two worked together things became confusing. I think it would have been more beneficial if, regardless of whether it was found in the book, things could always be summerized in the notes. That also makes re-studying and recollection a lot easier.
- They were easy to read and supplied us with a good basis for understanding the concepts
- Some days were easier to understand than others. The pictures were great because sometimes words get cumbersome. Also, it was nice to have notes to read along with during class.
- i was amazed at the power point presentations everyday, the guided notes were very helpful in understanding the concepts
- Too much paper being printed out, for one thing; it could have been cut in half with a course book with printing on both sides. But these notes, with their study questions with no available answers, were also fairly frustrating in terms of the simplified explanations they generally gave in comparision to what was expeced on tests.
- A PAIN TO PRINT OUT!!!! But the lecture notes did do a good job of guiding me through concepts and making sense of what the book might have only briefly touched. It would have been better if the notes could have been posted farther in advance of class periods.
- I prefer there to be fewer questions and more examples and explanations as to what we are dealing with. To be bogged down with questions before understanding the material is a little frustrating.
- I really liked getting the notes of the internet, and being responsible for reading them and doing the quiz. I feel like that prepared me more for class.
- some tended to be VERY long
- I felt that the notes posted on the web definitely aided in the students paying attention in class and not worrying if they coppied every thing down the teacher said
- sometimes frustrating when i didn't know an answer to study questions and it was never given it and then the question was not answered in class
- I really like Jeff's notes!
- I preferred the way that Brad organized them, but they covered the material quite well.
- Notes were very helpful!
- I think they could have clarified concepts better
- This way, we did not have to take as many notes as well as it was a recap of what the text was explaining and usually in simpler terms

6g. WebPage

- It was a pain in the ass to take quizzes before each class, but it made me read the notes and the book and I was better prepared for class.
- the daily quizzes were nicce to get the points for but i didnt find them to be particularly useful.

- still nice to have there even if not used much
- I had a difficult time understanding the purpose of the Bulletin Board. I enjoyed the genetic poet. It was interesting. :-)
- bulletin board has a lot of potential that should be used.
- The notes were generally good, but I didn't really look at the rest of the website.
- it looks good to me!!
- I think having a website specifically designed for the class is brilliant. I felt like I could always check in and be sure of what was going on. If I ever had questions, I knew they could be answered on the website.
- no suggestions
- More poetry!!!
- the web was great for keeping me on track. i wish all my classes did this.
- I looked at the Bulletin Board, but didn't post anything because it didn't seem like it was used much.
- I forgot about it until about half way through but when I remembered to look at it - it was helpful...wish I had ready it earlier!!!
- i wasn't really sure what the purpose of some of the links on the homepage was, but that may be because i didn't go looking for a lot of information through them
- have the notes and quizzes up a couple days before the class day.
- i think the bulletin board could have been pretty useful if people had actually used it.. maybe you could let us aske questions about problem sets on it that way everyone could see.. like a class problem solving thing
- NONE
- It would be nice if you could put up the notes further in advance. Especially before semester breaks. It would have helped to get a liittle ahead in during those rare occasions I wasn't behind.
- make sure that the online quizzes are available when they are supposed to be
- the webpage was great.
- the poetry was highly amusing
- I was generally so preoccupied with visitin the lab, quizzes, and calendar parts that i never got around to the other stuff. i did, however, enjoy the genetic poetry at the beginning of the semester.
- I really like the web-page idea, for organization purposes and fore access to many informative links to the course.
- Sometimes i didnt feel that everything was clear as to the expectations of what material to do before and bring to the tests. In some instances i wished there was a little better explanation.
- Put More Stuff From Lab on the Web
- Nope,it was done quite nicely.
- It would have been great if we could see our average in the class/lab at all times.
- I visited the bulletin board, but saw no use for it.

- I visited the Bulletin Board but I didn't personally make use of it. I visited the Genetics Poetry section, but I didn't personally make use of it.

7b. WebBenefit

- relating to the movement in society today toward internet use
- It allowed 24 hour access to the class.
- great resource
- i thought the web was useful.
- A.yes-of course- although at first all of our quizzes and notes being on the computer was sort of intimidating since I'm really bad with computers as far as edit base, pc fly, and other computer programs we used- i think better instructions are need for those who are computer illiterate on how to save them to disk, etc- i always had to get my suite mate to do it for me!
- Kept me organized!!!
- I liked being able to know what was going to be taught in class ahead of time.
- it makes no difference to me whether the notes were on the web or handed out in class (the class before) because i go to class but i'm sure those that don't enjoyed the benefits of the web.
- I loved it
- i think it kept the level of communication open between everyone, which is good, and better than having syllabi that get confusing...at least this was from a day to day basis...based on our pace...or at least it seemed to be
- It's really nice to be able to access notes at our convenience. I like it very much and wish that more courses would be web-based.
- I liked that I could get the class notes on the web, that way I knew what the topics were going to be the next day in class and I wasn't totally unprepared. I think without prior preparation before class these concepts would be impossible.
- The quizzes forced you to stay somewhat up to date on the information. Also, it was helpful in explaining how to write the summaries.
- i think it was good, it's just that i've never had a class that was so web-intensive before so it took a little getting used to, but it is a great idea and works well
- I wasn't used to it at first, but it was wonderful. A great resource any time of the day.
- The online quizzes and class notes, except for the fact that the notes were often very long and required a lot of paper for printing, were beneficial because they summarized and went over key concepts, as well as providing a way to offer feedback to the teachers.
- I thought it was nice to be able to go to the website and have the syllabus there and quizzes, along with a way to reach any of the professors.
- very very helpful
- Given that we skipped around in the book a lot, the web stuff was beneficial, but I do wish it had explained things better.
- It was nice to be able to get notes off of it, but occasionally they should have been put up in bulk so as to work ahead.

- I liked having everything on the web b/c you can work then at your leisure. Look at everything when you have the time, etc.
- it made for a little difference in a class, which was nice. it just happens to be the hardest class on campus, so we probably would have been even more lost without it
- it was very nice to have the class notes, quizzes, and special instructions about exams/labs available at the click of a mouse
- It provided a way to answer simple questions without having to worry about contacting a professor.
- it helped keep me organized
- This is the first class I have taked that has a web page and I found it to be a very useful resource and I dont know what I would have done without it
- Like I said earlier, I liked the notes posted online -- it made things easy and efficient when I could just log on from my computer and see what was going to be discussed the next day. Plus, the webpage was very easy to use.
- keep me on top of what we were doing, the calender was excellent and the notes were as well
- I am not a fan of the web-based stuff because I am a technophobe; there weren't huge issues with the web except that the constant quizzes were an irritation.
- it made it easy to get assingments and answers to questions anywhere.
- The website organized the course information very well and provided a place to go if one had any questions.
- I used up alot of my print quota just on genetics!
- I loved the website. It was like having a 24 hour connection to the issues and problems of the course. Knowing that it was constantly being updated was a comfort as well.
- quizzes made it easy to see what i needed help in
- I think so, because at least if you had questions, some of the sections on the web were helpful without having to go to the teacher all the time.

8b. ProbSolving

- I think that my problem solving had improved dramatically
- Some tests I would go in feeling like I didn't know anything and still not be able to solve the problem, so I'd make things up.
- I do indeed feel more confident about my problem solving abilities and this course taught me a lot about myself as a student and a person.
- mainly im most proud of my ability to not skip a problem that looks scary and to be able to figure it out in pieces
- i had never done so much problem solving...although it was a bit odd to do all this problem solving where we never knew the answers and could have gotten everything wrong and never knew it.
- after much work, i am now able to analyze such questions much easier than before entering this course
- A.yes!!!

- At first problems overwhelmed me. Now I tackle them in smaller, less intense section. A good lesson for life. I have gain much confidence in regards to asking for help.
- this course has given me uttmmost confidence in my problem solving skills
- I feel that I increased my problem solving skills, but I think that this course would have been much better if there had been solutions posted to each problem sets. When I would have a question on a specific problem I would get conflicting answers from the TA's and Brad and Jeff. Therefore, I am still confused on some of the topics we learned.
- I don't think the problem solving should be the major objective of the course. I took Genetics to learn about Genetics, not to learn how to solve problems. It's fine to make problems part of our learning experience, but it's too much to make the whole class centered around just that. I missed the majority of what you hoped I would learn because I was too busy trying to learn how to solve problems. I don't think you were hoping to obtain that goal.
- increasing my ability - A.yes. but i still don't feel totally comfortable with it - some of those problems still get me. it takes a while to get used to. my one suggestion about that would be to make the first few problem sets a little lighter (for the first test or whatever) to ease people in to the idea. you must remember that we've never before seen anything like this and it's hard to adjust to.
- I waz never able to solve problems like those in the problem set-this class taught me how.
- i do notice myself everyone now and then, solving problems different that i did at the beginning of the semester
- But the entire class should not be centered around that at the expense of teaching the material.
- I feel that I can do more problems, but still need guidance to get to the point of answering many of them. I would have been lost on tests had it not been for the extra review sessions priot to the exams. It would have been really nice to have answers to the problem sets, even though I do see that such could pose the problem of some people not doing the problems and just waiting for the solutions.
- Although I thought the tests and material were very difficult in this class, I believe I have learned more in this class than any other class taken so far at U of R
- This class only caused me to doubt myself and feel that i will never now the right answer. There are some things in genetics that are facts, perhaps it would have been more useful if the problems had answer keys or something
- between some and very much. i love your approach to a course of problem solving and think highly of you for donating one third of the lecture time to this effort. the presentation of the course and your attitudes were very conducive to finding various ways to solve one problem. very unique and certainly memorable.
- It was extremely frustrating to look at some of those problem sets...a lot of the time I had no idea what was going on. Sometimes it was nice that I struggled with things on my own, cause sometimes I could get it, but oftentimes I just could not figure it out, and it was frustrating to me that I never knew if I had the right answers or was even approaching something the right way. Sometimes I found out I was totally off when I thought I was on the right track. Suggestions for approaching the problems should be available to us after problem set days, or even the solutions or something else. I hated always being in the dark.

- Even if you understood the concepts of the topics we were covering, you had to be able to apply them to real life situations. I think this kind of learning will be extremely beneficial for the future.
- i feel like i look at things differently now, the only frustrating thing still is that when i attack a problem i never know if i'm on the right track or i'm way off since we rarely got the entire answer to a problem. i could not check if my thinking was on the right track.
- I have learned so much about getting down to the core of a problem and analyzing it in pieces. I know that this will help me later in life.
- I know much better now how to look at a problem and not be totally scared of it, and how to figure out what I do know and use that to solve at least part of the problem, if not all of it.
- I learned more in this class than I did in any other class.
- A.yes. i definately aquired more ability for problem solving. although god knows i complained like hell at the begining.. and i was very scared.. i feel very rewarded now!!! :)
- I think I am pretty much in the same place I was when I started the course and it just made it frustrating and stressful with all of the problems I couldn't answer and several times I just gave up because of frustration. Given time restraints, I hated not having an idea if I was on a right track - A.yes, sometimes I got help, but what aobut the ones I thought I knew? Just because I thought I knew it, doesn't mean I did. Basically, I thought problem solving was frustrating and I don't think I got much out of it for the future.
- Overall, this is the largest amount of help that i received from this course. the problems are essential and i really learned how to tackle certain issues.
- Although it got VERY frustrating at times, I do think that I learned a lot about problem solving which will be very helpful in the future. I can tell a big difference between how I approached the first problem set and how I approached the last problem set (with much more ease!).
- those abilities have always been my strong suit. im not so good at just memorizing and spitting it back out, it seems useless to me.
- i feel like this course did enhance my problem solving skills; on the other hand, i also feel somewhat that i was so lost when approaching a problem i had never seen before with numerous steps to reaching the answer that developing better problem solving skills was difficult to do
- The problems taught me how to take concepts and apply them to different situations. However, I felt that what I learned from the problem sets was not as permanent as the concepts learned from the notes, text, lecture, and lab.
- This course made me think in a very analytical way.
- By the third test I was a lot more comfortable approaching things.. I studied a lot less for it but still managed to do well just becuase I was better able to approach things I didn't know how to do
- Incredible amount of problem solving
- The problems required deep thinknig and complete mastering of the concepts. I think the problem solving techniques will help us later in life too.
- Problem sets were good practice for the tests, but I didn't like the fact that we never got answers to the majority of questions. Sometimes it's nice to have an answer key and work backwards to figure out how to solve the problem, but we weren't given that luxury.

- the first problem set was daunting, but as the course went on i learned how to approach the problems and they got much easier
- I learned to analyze and etc. but I felt that I was expected to assimilate too much information in an abstract way... i.e. I would get concepts and be able to apply them in lab, but have severe difficulty with the problem sets that were clearly looking for a "right" answer without that many clues as to what it was or even telling me when i'd gotten the right one.
- I DEFINITELY am a better thinker after taking this class. A.yes, I did often sit at an exam for 6 hours struggling, but it is extremely rewarding to be able solve problems that initially seemed impossible. I believe I do have a better idea of how to best approach the types of problems we considered in this course.
- I have never had to use my skills to analyze problems like i did in this class. Congratulations.
- the course was definitely challenging in this aspect. i like that though, because as long as you understood what was going on, there really weren't clear cut lines as to right and wrong. but different ways to solve a problem.
- throughout the course, i often felt like my attempts at problem solving. i did not like how we werenot given concrete or at least possible answers on problem sets. i thought it defeated the purpose b/c i was never able to find out if i was doing the problem correctly.
- i can look at a problem that i have no clue how to solve and at least be able to begin somewhere.
- I really felt that the problem solving helped me, but I feel that the questions need to be discussed as an entire class, one by one, with the help of the professors
- THis course greatly expanded my problem solving skills.
- I thought that the focus of the course relied too heavily upon problem solving skills.
- This course has definitely helped me to think about problems in a critical manner and being able to apply answers to real life situations. It has helped to increase my problem-solving skills also.

9d. ProblemSessions

- I think they were helpful at first, but toward the end of the semester, no one came to them and I felt as if I was just telling peopl my answers! very frustrating!!!
- I felt unprepared just focusing on a few problems and many times, the problems that weren't starred were harder than the starred ones. I wish we had had more problem time so I could have understood those also.
- I wish that a solution set to the problem sets were made available before each exam so that I knew without a doubt whether or not I was on the right track.
- karen is awesome
- the help from the teacjers and TA's wsa very good since we sometimes had no clue as to the answers
- I was never sure when our answers were right. I would have more faith in the problem sessions if a solution was available to compare answers. Because of this I always wanted to go over answers with faculty/TA's. Therefor it became hard to get all my questions answered.

- i think the problem set days are a neutral aspect of the course. they are only slightly beneficial. I think that there should be some sort of cool activity on those days instead so the students can see the awesome uses and beauty of genetics. i think it would be more beneficial than a problem day.
- though i had a good group - so i can imagine that it would have been a pain if my group sucked. everyone came and had done it which was quite beneficial
- Most of my group never did the problem sets. I think problem days would be better if we split up into larger group with 1 teacher or TA per group...like review session days
- A.yes b)yes c)yes - although sometimes TA's and faculty did not show up at regularly scheduled session times w/o telling the students before hand
- Again... how about a straight answer for once!?
- I found the problem set days helpful, but there usually was not enough time to go over more than a few problems and the rest were left unanswered unless I went to special help sessions. It did help to work with other students on the problems though, that should be encouraged more. I did not feel that we got enough help from the teacher or TA's because a lot of the time our group had things under control and when we didn't I guess they assumed we didn't need help as much as the other groups.
- the problem sets were a great idea but leaving us with them without ever really getting definitive answers was very frustrating. i would have liked to work in larger groups also, the more minds the better
- Problem days were great. I felt that it was good to talk with other students and get their ideas on concepts. Working on only a few problems really helped me understand specific topics.
- The problem sessions were very useful--however, we sometimes couldn't get teacher or TA help, and we sometimes ran out of time.
- i wish my group would have cared about problem set days. i teamed up with another group to get more help on the problem sets towards the end of the semester.
- The biggest problem I had was even if we thought we knew it, that didn't mean that we had it right but there was not an easy way to figure that out and it was too easy for one person to push over the rest of the group towards a wrong answer.
- I personally didn't find the problem days very useful because for some reason I feel like my group didn't work well together. I think the problem set days depend on who you have in your group. Since I didn't have useful problem set days I usually met with another group of genetics students outside of class. This was the most helpful for me.
- we would have been dead without them!!!
- the few problems we did get the chance to go over, i felt like i understood very well. however, i was still usually very lost on the rest of the problem set. i almost think it might be more beneficial to everyone to run the problem set days like a study session - have the whole class ask questions of the professors/TAs as a group
- Our group was relatively small, which did not help in our efforts to work the problems. We also had a group member who was absent more than present on problem set days.
- you should have had the answers posted on the web. those who want to do well will do the problem sets without the aide of the answers, but cannot be sure if their answers are correct

- i didn't attend problem set days because I rarely had time to finish the problem before the day.. that and I felt like nothing really got accomplished and that the members of my group really weren't that helpful--not very many of them did the problems
- I think that more time should be spent on each concept. I found that in class we only had time to cover part of the notes. Why not spend 2 days on a set of informations so that it can really be mastered.
- i really dislike the problem sessions for a few reasons. first of all, my group never did the work so i never had anyone with whom to check my results and the TAs were not really helpful either, most of the time they weren't very sure of their answers and Brad and Jeff usually leave you with more questions than answers.
- it was good to focus, but often all the other problems were ignored and they would appear on the tests
- we could focus on problems, but that didn't cover all the material that would show up on the test.
- Problems set days were useful, when other group members had actually attempted the problems. I often tried to do all problems instead of focusing on a few, because I felt that they were ALL important and I needed to understand everything. Special help sessions were invaluable. THANK YOU for giving up so much extra time to help us understand!
- i felt that sometimes with the problem sessions that a few members of the group would just take over and not help in explaining the problems to the other people who did not understand.
- i feel that the small group situations is not very advantageous, but I like the idea behind the problem set day.
- These were my favorite class days because it helped to apply the info from lectures and understand the concepts that much better.
- I felt like I could have just attended a study session to get questions answered and not have "wasted" time in class.
- I would have liked to have covered more in a class period, but I guess we only have 50 minutes.
- I think there was not enough time to sufficiently go over the problem sets. Also, TAs and faculty were difficult to find

10b. Quizzes

- this is a tough one, I didn't think they were very beneficial and I am not exactly sure how this could be improved
- Sometimes I felt like people just took the quiz and half-assed it. If you made the grade we got count, I think people would have actually read the notes more and not just checked all the topic boxes at the end.
- no
- i think they weren't that useful bc the questions were factual and bc they weren't graded, i didn't put too much effort into them. however, if they were graded, i know myself and others would just complain about the added work, so i guess quizzes fulfill their purpose and should be left alone.
- have them worth more credit... i would have spent more time on them

- Thank God for the QUIZZES. They were very encouraging when I felt like I had no clue.
- no
- If you made them count, more people would take them seriously rather than just doing them to gain the extra points.
- i could usually do the quizzes without doing the reading
- Just stressed me out-making sure they were done in time so I would get points for the test
- A.yes, they were beneficial...got us thinking and most importantly we could let you know what we needed help with
- A.yes b) no - leave as is
- The quizzes were extremely helpful in that they got me to read the notes and think about things. I also really liked that you had study questions and concepts that we needed to focus on...that helped a lot and it gave me a chance to tell you what I thought was hard and needed help on. THE quizzes could maybe focus on harder questions, or ask what the students' answer to a tricky study question was, cause sometimes I got them totally wrong and never really knew until later that I had gotten them wrong.
- I think the way they were structured were good because they forced you to read the material, and also gave the profs. an idea of where the class was struggling.
- i think they were good, just to help get me focused and clarify key concepts
- They weren't really useful, but they did get me to do the reading. I think in general they are a good idea, from a teacher's point of view. But the questions weren't challenging at all - they just tested to see if we had read. Perhaps make them more challenging.
- A.yes, the quizzes were helpful for preparing for class, because they did make me read the notes and they offered a chance for me to tell the teachers where I needed help.
- No suggestions
- the carrot worked. they helped alot and helped to focus the discussion in class the next day.
- They were ok, but the biggest problem was usually that I had so many questions that I couldn't get everything answered that I needed to - I wish at least there had been better answers and explanations for the study questions.
- make them slightly longer incorporating more topics
- I understand the reason why you used the quizzes but a lot of times (when I didn't have time to read the notes before class) I could definitely take the quiz without reading and still do well. So I think if you make the quizzes harder - then the students will force themselves to read before taking the quizzes.
- i would forget about them and just take them quickly, which is my fault. the idea is good though.
- i feel like the quizzes were of much more benefit to y'all in terms of knowing what to focus on in lecture than they were to us as students in our reading, but i don't think that's necessarily a bad thing.
- I think that if I as the student indicate which areas I am having trouble with on the quiz, then to be asked a question on that same topic is a little frustrating.
- i thought it was good...

- it made me at least look at the material prior to class
- Make the grades really count, instead of just whether or not complete
- The quizzes definitely forced me to read the notes before class each day.
- Don't require them to be completed prior to class
- only tested for very basic understanding
- It was good that you guys could get an idea of where we needed help, but a lot of time I had to take the test before I'd even read the material because after 7 am was too late but i didn't have class until later and wouldn't read it the night before but rather the morning of.
- Quizzes were usually completed very hastily, because reading usually took enough time and because we weren't penalized for missed answers. The idea is good in theory, but often I feel that the book DIDN't do a good enough job of explaining, and only a class lecture would have been able to give me complete understanding of a concept so that I would be able to successfully answer some of those questions.
- I think the emphasis on the quizzes was exactly what i needed. I dont feel there should be any emphasis on grades with these quizzes but i agree with having to do them.
- sometimes the questions were ambiguous.
- More challenging
- they let me know if i at least had a small understanding of the material
- The questions seemed to indepth sometimes about the concepts and didn't get us started on understanding the concepts prior to the lectures.
- They helped to understand what ideas were important out of the notes.
- The quizzes were useful in fact for getting me to read the notes for class.
- By having us take the quizzes before class, it helped me to read the text ahead of time and to know beforehand what specific areas of the chapter I needed help with. This made it easier because I was able to go to the teachers and ask questions right away rather than waiting with all of the questions until right before the test.

11g. NonProbDays

- I felt as though the same individuals were called upon in clas on a reular basis. This was a major probblem, becuase I feel that some people's opinions and ideas were never expred to the group. It would be beneficial to try and learn everyone's name as soon as possible and make sure to ask questions to more of the class members
- Maybe you could give a class participation grade
- I liked how you called on people and made them make sense of the information. It helped others listening to think of their own response and made people pay attention and come to class prepared.
- personally, the thought of being called on frigghtened me to no end. i know not everyone shares this view. i may know stuff, but freak out when called on and i'm intimidated by the people in the class who seem so much smarter than i am. honestly, there were times when i missed class on material that confused me bc i didnt want to be called on with no clue how to answer and i used the class time to work on the material on my own. granted, this was ridiculous of me, but im being honest.

- class at times was useless because you had to know the information prior. It was only helpful if the information made absolutely no sense in the notes
- class participation grades
- helped people to participate and understand but calling on people also seemed to waste a lot of time when some people didn't know the answers and it kept trying to be pulled out of them- i'd suggest if they don't know their answer to just move on and say the answer so as not to waste time
- The classroom environment encouraged learning. I don't like talking in front of large groups and this class has made me more comfortable with that. I would like it if we had a discussion day like those before exams to address problems sets because exams are based a lot of these.
- no
- I don't think this course should be based on class discussion at all. I think it would be much more informative and to the point if it were a straight up lecture format.
- i didn't necessarily like being called on in class, but it was incentive for me to understand the reading. i didn't really think it was discussion-based like you said it was going to be. i mean, y'all asked for what we wanted to hear about in lecture and we "discussed" if we went in for help, but other than that... presentations were useful i felt like we could have all been in the same class (all 80 or whatever) and it would have been alright why does it need to be class-discussion oriented?
- Some days were better than others. Seemed that with large chunks of information, we often only centered on 1 or 2 topics, leaving a bunch that were not talked about. Need smaller classes or at least a classroom so that we can hear all that is going on
- a different class room...that isn't so "lecturyish"
- don't have classes before 11:30
- a)seemed to cover most relevant topics b)yes c)very helpful d)yes e)slightly smaller than current size f)smaller classes
- We are here as undergraduate students to LEARN the basics.... not to hunt for them, not to guess at possibilities... i could never feel prepared to go to a genetics graduate program... i would have no clue what was going on... but i would know how to BS
- The class was too big I think to encourage that much discussion. Sometimes it was hard to get questions answered in class because other people had lots of questions as well. The power point presentations were very helpful and I liked them a lot. The only problem I had with these days was that we seemed to cover the easiest topics and left the hardest ones for the last 5 minutes of class. Usually I sat bored the whole class and then when we were getting to the part that I needed help on the class was over. I don't really know a way to fix this, cause I think other people wanted to go over more than I did. Topics were covered extremely quickly also, so that if large chunks were left out in the day before's class, there was no time to start with that the next day.
- Though I liked the way the class was set up, I feel like some individuals did not get called on as much as others. It was fairly interactive though, which really helped keep me interested. I found reading the notes the night before, then having them explained in class with slides and discussions extremely useful.

- i think asking just a few questions was good i didn't want it to be too discussion based because not as much gets done. i think there was a good balance between brad and jeff talking and getting students involved. but honestly, the reason i came to lecture was because it made the notes come alive and helped emphasize important concepts, not to hear my fellow classmates try to figure things out. since there was so much to cover i appreciated limiting the student interaction.
- I think smaller groups induce more class discussion. A lot of times people would not speak up because it is such a big room and a big class. Also, if you don't understand something, you are less likely to speak up, for fear of embarrassing yourself. I would encourage people to sit closer together, and maybe have people build on each other's ideas more.
- Sometimes, reviewing the easier background concepts of a section would take too much time away from going over the more important and complicated concepts, which is my only complaint about the normal class days.
- Most of the time, I thought class was extremely pointless. I did not learn a thing in class. I think more emphasis should have been placed on general concepts instead of individual study problems.
- small class size would be better for more effective discussions. too bad not all the material could be covered though. the compromise was ok.
- I didn't like calling on people because if I didn't know the answer I just felt really dumb, especially when you would try to pull out the answer and I or someone else still wouldn't have gotten it. Some days class was very helpful, and some days it wasn't -based on what topics were covered and if they were topics I had wanted help on.
- occasionally a little more could have been covered in class rather than beating one issue to death
- i liked the setting, but it was just so much info and so brand new to us most of our other classes are part review from last year or a high school class we had, not this stuff. i think the problem set days were focused on more because those were the format of the tests. in a class like this you have to call on people, otherwise they would just give up and fall behind.
- I don't really think that we had a lot of discussion in class, more like you asking questions or students asking questions. Sometimes when Jeff would teach, we would dwell on a topic for too long, and miss out on the out on other topics. I think that if you want the class to be more discussion oriented, then there should be no more than 18 students, and we should not be in the lecture room.
- not everyone goes anyway
- I also was pretty lacking in my attendance.. I learn a lot better by doing stuff on my own and since you gave me that option I took full advantage of it. AS far as the classes I went to, I guess I didn't really see the point in asking us questions since you always said the answer in some way before asking the question.. I guess it keeps us more involved. I think that maybe you should go over some problems from the sets in class though
- have it in a discussion classroom set up instead of a lecture hall
- I think that you did a good job engaging the class with questions. At the very least, it kept people awake. I also think that by you asking questions, it fostered an environment where we could feel comfortable in asking questions.

- i enjoyed the class time but sometimes the questions jeff and brad asked seemed very hard and just ended up confusing me more.
- calling on people was good, because it made sure you were paying attention, i think you included us in the discussion as much as you could without sacrificing time to teach us the basic concepts
- A lot of this material was both very foreign and mildly difficult, so calling on people was nerve-racking when i didn't understand. The focus on several topics might mean that there was just too much being covered; in every other class I've had, most of what we're responsible for was covered in class.
- I regret that ALL important concepts couldn't have been discussed in more detail in class, but that is the compromise. You did a great job of touching on the most important things. I think it was an excellent idea to call on people in class, to get people thinking and to give a reason to be prepared for class. I feel that missing class would have put me at a severe disadvantage and I did not do it. I don't think the class size was too big, but 50 individuals is excessive.
- The only complaint i had with the class discussion is that sometimes we did not cover things i personally needed clarification on because we some times got bogged down on other things. I feel that this would happen less with smaller classes.
- Ask everyone to bring a question to class
- i really wish that the course wasn't so rushed. i often felt like i would leave the lecture without having all my questions answered because we didn't have time to cover them. however, the following class we would continue to move on to new material. i think that when we didn't finish all the material from one class we should have picked up where we left off before moving on.
- i really don't feel much time was allowed for individual questions on topics that we didn't understand
- I think that some of the questions asked in class to individuals were hard to answer because the students are trying to process the information, and it's hard to answer difficult questions while doing this.
- Including a class participation grade would help motivate people to participate more widely in class.
- A lot of times I left feeling like I would need to always come back after class to learn material that should have been understood CLEARLY before I left class. It's like I might as well not come to class and just attend help sessions.
- It was good because it promoted active participation. But on the other hand, there were many times when I was praying I wouldn't be called on because I didn't have a clue. It was kind of discouraging, but it's not something I would miss class because of. I think smaller classes would definitely induce class discussion, but I don't know if that's possible.
- I often felt intimidated being called on in class. From my understanding, mostly we discussed the topics people had difficulty understanding. If you don't understand something, then I don't think you should be put on the spot to answer a question. Concerning the usefulness, it depended if I already understood a topic or not.
- I think that it was a bit helpful in calling on people in class because it made those people who didn't understand voice that fact and have it explained to them. I really liked the discussion

based format because it allowed for more interaction between the teachers and the students, whereas in lecture style classes, the students don't really feel as though the teachers care about their opinion or whether they really know the information. I think that for this course, a smaller class size would be a bit better because there would be a greater chance for interaction and for asking and getting the questions answered than when you have 50 students clamoring to get their questions answered all at once

12c. ProblemSets

- I was not aware of this confirmation by e-mail. I wish that I had been aware of this because I often felt that confirmation was necessary.
- I didn't know we had the option to have you confirm our answers by e-mail
- I didn't know we could do that. I still believe a solution set should be available either on reserve in the library or on the web a couple of days before each exam.
- they were very frustrating...but prepared us well for the tests
- before the exam, send the answers over email so that we can check them over with the answers we got...
- we could focus on the starred ones better if there were less un-starred ones c)i had completely forgotten- or maybe i never knew- that this was an option
- The problem sets were a challenge but they prepared us for the test. I was rewarding to answer all the questions. Sorry I had no idea about sending our answers for help through emails.
- post solutions on the web, only made possible after the problem set day
- not enjoyable, but satisfying i don't think i knew that this was an option. i probably would have if i'd known (or realized)
- Post the answers on the web, then anyone with questions will know where to focus their energy. ONLY posting the answers means that those who did not do the problems will not get the benefit of understanding how to do the problems, only the answers
- i must have missed that we could do that!! wups
- I'd like a class format the more closely resembled the extra review sessions before class - discussion based yet with the professor writing solutions and explanations on the board.
- A.yes - prepared me for tests b)um..not really c)going over problems questions in class!!
- Teach... give us direction, we are young and need to discover ideas and facts... don't make us have to swim in them
- Maybe reinforce that you would confirm answers by e-mail - that fact seemed to have slipped me by.
- They were extremely frustrating and not fun at all to do. Sometimes I was way off and didn't find out for awhile, if at all. There should be a web page or something that has suggested answers or at least some HINTS for the questions because a lot of the time I just had no idea where to begin. I agree that to learn a lot you have to struggle with an idea yourself, but after a reasonable amount of time there should be some way of finding out if I was right or not. Eventually everyone needs answers, especially if you have no idea how to start a problem.
- Enjoyable is pushing it, but I do think they encouraged a new way of thinking. To be perfectly honest, I did not know about the confirmation of answers via e-mail.

- i didn't know that option existed. it was not really emphasized. i would have liked to have known that before. but that's a great idea. even posting answers is a good idea b/c the thing is, you need to learn how to solve the prob's so if you don't do them and just copy the answers that's not helping anyway, but this would help those of us that do the problems
- I didn't know about that offer. But I think I would be more apt to come see you in person or talk to people in a group to figure out problems. I can't say problem sets were enjoyable, but they were satisfying when you finally got the answer right. They were a great help on tests and in general increased my problem solving skills.
- I often didn't understand the problems in the problems sets completely, which was frustrating, but they did help me learn to problem solve well.
- I think that the answers should be posted on the web after the problem set days. People have enough to do in this class. The answers should be there at our disposal after the problem set days.
- i honestly did not even know that we could confirm answers by e-mail. this is probably my fault, i wish i would have known about this service. However, the problem sets were great. I really feel like i can approach a highly complicated problem and come up with a reasonable approach to an answer, if not an answer itself.
- I know you said you don't like to post an answer solution, but maybe that would be easier to do later in the unit - the people who got help are still going to get help if they don't understand things, but I think it would cut down on the stress of the class. Maybe something to do is to provide an answer sheet, but after each question ask another related one for further practice so we can learn how to approach the questions.
- i wouldn't exactly say enjoyable...
- I liked the help sessions with Brad and Jeff the most - e-mail is hard b/c then you have to wait for the response - etc.
- we had that option? im sorry i missed that, it would have been helpful and again my fault, i should have known, the teachers were always willing and wanting to help
- maybe distribute answers/ways of solving the problems. sometimes i had no idea if i was off or not, but this was true os so many problems that it would be impractical to email y'all about all of them
- i really didnt know that you could emial the answers to you. i would have taken advantage of this much more often.
- I bascially used the problem sets as a way to see what type of material would be on the exam.
- we had no way to tell if we were right; the answers should have been posted somewhere
- like I said abovew the bulletin board thing.. that way those of us with out really productive groups could still get help from other sutdents
- More outside sessions like the extra help sessions, because a lot didn't work in my time frame
- who knew that was a possibility i think you never said that...
- I think that problems set days might have been useful for some, and not for others. It would have been more beneficial if each problem was gone through as a class, with teacher guidance rather than in small groups.
- post suggested answers on the website

- Answer key on the webpage. You put everything else on there anyway and students would definitely double check their answers.
- i must have missed that offer...keep reminding us about it!
- the only thing i enjoyed about them, was that they represented the stuff that would be on the tests.
- you guys were available enough, if people had questions there was always someone to talk to for help
- Emailing you answers would have been just another assignment when we were already going crazy with work... a few of the problem sets were helpful and good prep for the class, but they were just awfully demanding.
- A.yes, I am a much better problem solver after struggling through those! They were satisfying once completed/understood, but definitely not enjoyable during the process. With regard to the e-mail thing: because there was so much else going on in this class and others, it was difficult to really get a head start on the ps's in order for there to be time to e-mail back and forth.
- give out an answer key on the problem set day. it's too complicated to do it via e-mail.
- i actually wasn't really aware of this option. i think we often need reminding of things like this, especially when no one is taking advantage, i think if i would have known, i might have used it.
- I didn't know that that was an option
- Office hours were sufficient
- I personally was unaware that this could have been utilized, otherwise, I definitely would have used this kind of help.
- Post the answers on WebCT.
- c. Posting answers or hints on the web.
- I honestly wasn't aware of confirmation of answers by email.

13c. OfficeHours

- seemed as though many of the office hours were at times thaty conflicted with my class schedule. (ie afternoons)
- I didn't go to too many (maybe 2) because I didn't want to sit through other people's problems. I'd rather have had the opportunity to figure the answers out on my own and be able to access the correct answers.
- I wish there were more office hours on the weekends. I had conflicts with Jeff and Brad's hours. I did not feel comfortable seeing the TA's for help.
- i didn't go during "office hours" because i had a time conflicts - but i frequented Brad's office to ask questions about stuff (for when i went in for help - not during office hours)
- A.yes b) able to learn more from teacher one-on-one
- Thanks for being so accessible, I really needed it.
- Friday afternoon isn't a great time, and I unfortunately had a class every tuesday from 4-5:30, so I made more of the review sessions than of the scheduled office hours. often we could talk to brad or jeff after lab or whenever we ran into them.

- I mainly used the office hours before tests, to confirm problem set answers
- office hours were great. very very beneficial, and help was very accessible.
- Office hours were good, but frankly, by that point in the week I was so tired and frustrated with Genetics I didn't care. It was just a draining experience overall and all I wanted to do if I had free time was go back to my room and collapse.
- there could have been slightly more..very few more granted but occasionally more
- almost all of the office hours were around the same time, practice and dinner. i know late hours stink for the prof, but it would be nice
- a better idea might have certain hours for certain numbered problems....like Mondays for 1-10, Tuesdays 11-19 so that you don't have to answer and we don't have to sit through repeat questions.
- Almost all of the hours were during my practice times
- I think that office hours with Jeff and Brad were really helpful since it was a much smaller group of people and I got my questions answered.
- Help was available, but it seemed like the effort to go get it would take away from the necessity of just getting things done. Also, when things are getting done at 4 am the night before, of course no one's going to be available.
- During-the-week hours were almost impossible for me to make. Friday afternoon was good; pre-exam weekend ones were the best. I don't want you to have to give up weekends, but that seemed to be when most people could come. It often seemed like office hours were for 'cramming' (before tests), but other priorities take over during the middle of the units. I did often have specific questions, but often, I just wanted to better understand EVERYTHING.
- I rarely had any questions so I did not use the office hours that often, but when I did I was always able to fit them into my schedule.

14g. TAs

- I thought that Karen was the most open to questions and had the best hours for my schedule
- They may have been a good resource, but I'd rather get my help from Brad or Jeff.
- I did not use the TA's.
- I do not feel comfortable seeing the TA. I find myself getting more confused.
- but Jen Lee was in our lecture section on problem set days which was helpful
- the 1 time I saw a TA she spent the time individually with people, not with the entire group like Brad and Jeff
- I worked with Sarah multiple times, especially before the first test, and found her extremely helpful.
- helpful b) somewhat helpful
- Garrett helped us in Problem sessions though and was extremely helpful.
- I only visited Garrett b/c he was present in class as well and I thought I'd try him. He was pretty helpful for a TA but sometimes it was not enough.
- Karen is great - she really knows how to explain things on our level and is very concerned for each and every student.

- Jen was a great help - she didn't always know it, but she tried to work through things and explain it in a way that was helpful for me.
- jennifer was also our class TA and was very helpful
- sarah was helpful too, i went to one of hers
- However, Garrett was helpful AT problem set days, and amusing to boot.
- When I could find time to go to office hours, I thought it best to get help straight from the source. I DON'T doubt that any of the TA's would have done an excellent job of explaining problems.
- when i had questions i came straight to either brad or jeff
- I did not visit many of the TA's, so my input is not very helpful, sorry.
- For some reason, I felt more comfortable asking my questions of Brad and JEff than I did of the TA's. I think that I felt that they had done it more times and knew the exact answers, whereas the TA's weren't always positive of the answers. (not that I hold that against them, as they are learning right along with us).

15c. OfficeHours

- For the most part the problems sets helped, but it seemed that at times the focus was not only on the starred problems as was often presented in class
- They were basically the same, except you couldn't work with others.
- if you knew the problem sets, you knew teh exams
- A.yes A.yes A.yes. Except for the third test.
- i mainly focused on the problems sets and got b's on the tests
- helpful - but tests still very difficult
- If you could wade your way through the problem set.... maybe
- Very similar questions, I think everyone understood that the problem sets were important.
- I feel that if you were able to do and understand every problem set, you would do fairly well on the tests.
- A.yes!!
- I did, although I never saw that advertisement.
- do problems sets, you understand the questions on the exams. this was the commond thread throughout the semester.
- Yep, pretty much true, although it just made it more frustrating.
- It didn't matter what facts you knew..all it mattered was what you could do with those facts.
- some of the questions on the tests were VERY difficult - may have related to something on the problem sets but ten times harder.
- you really couldn't do well of the tests without having the background of the problem sets
- I think that maybe that might be a little bit of a lie since tests had some questions very unlike those in the problem sets.. but the fact that we developed problem solving skills from doing them helped a lot
- Especially on the third test -- having done the problem set was a major help!

- if you could do the problem sets, you could do the exam
- The questions were similar- i.e., all very hard without the satisfaction of being able to find the "right" answer.
- Definitely. Not only was much of the PS content covered by the tests, but actual problems seemed to be just disguised (or extended...) on some of the exams. I faithfully did all problem sets, and I did well on the first three tests... we'll see about the last one.
- The problem sets prepared you for what types of questions to expect on the tests.
- I really do believe now that the problem sets are the key to success on the exams.
- If you had worked on all of the problems on the problem sets, then the exam was not hard at all, just long.

16d. ExamFormat

- I felt as if the exams consumed my life and then left me drained for the rest of the week!
- Times tests is a stupid idea for these problem based tests because everyone analyzes and integrates information at a different pace.
- I think though long and challenging, the exams were a fair test of our skills and the problem sets prepared us as much as possible for them.
- the exams were long...but it they need to be since they were so long and involved
- There were way too many questions for me to answer!!! It was overwhelming. Seeing that the exams are largely based on the problems sets. I wished we discussed the answers more. I found this course extremely challenging, if exams were strictly timed I feel I would focus more on answering everything rather than putting the time and energy to answer questions well and to the best of my ability. So much thought goes into each answer and if the time was strict then I would have a hard time concentrating because I would be so panicked. This allowed me to relax and try my best.
- I found the exams to be very draining, much more so than any other exam that I have taken at UR.
- they already carried enough weight without reducing the number of questions! I think giving a more direct answer when a student asks if their answer is right would be beneficial - often I was unsure as to whether I was doing something right or not - it would have been nice to have seen an answer or get some kind of confirmation I think it was nice not to have to rush through them. but my brain doesn't function much past the 3-hour mark, so I had my own biological cut-off
- Not strictly timed exams, but they should not take me four hours to get through.
- just changed so more confirmation of correct answers. I also found that for some issues, especially probability ones concerning the second test, different answers and explanations were given by Brad and Jeff.
- a)yes b)no c)no
- How do you come up with the grades!?! Try to ask more straight forward questions, if we don't have to decipher the code to the question we won't be here until 3Am taking the exams.
- Don't really know how to make them better, but they were definitely horrible.

- Though the exams were long, I feel like they took a little longer because people knew they had as much time as they needed so did not rush. By putting a time limit, I think it would cause people to stress out even more about the tests.
- it seemed like most of the problems in the problem sets weren't even touched on in the exams. only a few were focused on and these didn't always seem to be the most important ones to me. some of the problems i thought were insignificant for the test while others i expected would be on the exam and were not
- Exams were long, but i think that is necessary for problem solving. i don't think it was too much to ask.
- I think the exams were fine. They were scary to take, but doable, and the grading was very fair.
- the amount of time it took to complete the exams was absolutely ridiculous.
- Do not time exams. fewer questions would be greatly appreciated. leave areas uncovered, that is what problem sets are for... so all material is covered.
- My comments on problem sets are above. But I would have preferred timed examples strictly for the fact that exams were a harrowing experience and I went into each one with foreboding and not looking forward to spending several hours in the room working on the same test.
- the tests were awful, but trying to cram it all in on a class day would be horrible too. thats why maybe a little shorter tests would be good they just fried my brain for a couple days.
- On the problem sets, there are a lot of little problems that never appear on the tests. Maybe you shouldn't have less problems, but shorten them. There is no way that the exams could be taken as is in a class period.
- post the answers to the p sets
- It was a real pain that the test tool so long, but I really enjoyed not having to memorize things for this class.. in the end I really think I learned more that way.
- Its not like there were that many problems on the exams. I think the problem was with the extent each problem needed to be analyzed. It was a hugh help that I didn't feel rushed while taking the tests, but I think you should make the exam with the goal of having most students finish in 1.5 hours. And be realistic about it. 4-5 hour tests just give un-needed stress.
- I would have liked the tests to be strictly timed but then I would feel that they would have to be made up somewhat differently in order for us to be able to finish them within the time limit. As they were this semester I would not have wanted to take the exams within a strict time limit. I never would have finished them.
- ITs hard to tell if time closed book exams would be better for this course because we never experienced any
- I didn't mind the types of questions asked on the exams. My main concern was length. After four hours, I lose focus and I don't think that students are able to indicate how hard they prepared when they have been working for five hours straight. I would rather have more tests with fewer questions.
- there would have to be far fewer questions in order to have a timed exam
- i think that the tests were extremely easy once you cover the problem sets, but it was getting answers to the problem sets that i found difficult. i never really worried about the tests and did very well.

- The exams are far too lengthy. I recall spending 4+ hours on each exam. Also, it took far too long for you two to return the exams. I honestly don't know why it took 3 weeks in every case to return the exams. We got the exams back, just days before our next test. I mean there are two of you, I think that fact should speed the grading process up.
- The fact that 15 question tests took 4 hours was perturbing, but fewer questions would just leave more room to suffer from points lost. Not all of us can afford to spend 5-6 hours on an exam on a Monday night; we have lives and other classes, but these exams, in this format, definitely required that long to do well on them.
- If there were fewer questions, it would have been more agonizing to be lost on a single one! Though I was one of those sit-there-for-6-hours-until-I-get-it people, it was nice to be able to jump around to OTHER problems which I could do, and get some confidence that I was actually not entirely stupid:) I hate timed exams, for the abovementioned reason: I'm persistent, and I feel I can usually come up with some answer if I work at it long enough. No one works at the same pace, and no one should be penalized for thinking things through a little more thoroughly. Jeff asked me once, (maybe on the second test), "Would you want us to cut you off at 2 1/2 hours"? I replied, absolutely not, unless you want to grade a blank answer sheet.
- I felt sometimes in the readings that there were more question marks than actual words. That is frustrating.
- although I like to have unlimited time, I thought the exams were WAY too long. I think that six hours on an exam is way too much but I found that this time was necessary. shorter exams PLEASE!!! spending six hours on a test can't be good for my health!!
- even if the exam consisted of fewer questions, we would still have to be prepared to answer questions that covered all of the material. also, some students would take up to 5 hours to finish the test. Frankly, I don't have that sort of attention span. even if I had needed to stay longer, usually after two to three hours I could not concentrate anymore. also, students who have other work may leave earlier because of this work, and have a disadvantage compared to others. the unlimited time also allows unprepared students to learn the material during the test, which is not necessarily the point.
- Felt that although I understood the problem sets, attended many office hours etc. that I still was insufficiently prepared for the tests.
- I liked the format of the exams. They may have taken longer than usual, but it covered all of the material and required that the student know the information and be able to analyze it very in-depth.
- I think making article summaries and the EditBase data due the night of the exams was very frustrating. It's like you wanted to devote as much time as possible to studying and going over the problem sets, but you were stuck in the library searching for articles. I think making the summaries or Edit Base info due a week before would have made things a lot less stressful. It's just too much at once.
- I think that maybe if not fewer questions, maybe some of the questions need not have been so long and involved. Also, I think that the problem sets were exactly like the exams and I found that to be a good way to prepare for the exams. I definitely would not have wanted the exams to be timed, because that would only have put more pressure on writing any answer down, instead of aiming to think critically about the problem and actually understand the concepts.

17c. ExamFeedback

- Sometimes the posted answers were totally different from my answer but then I got the answer right
- by the time they were posted i wasn't as interested about the answers than i had been right after the exam
- the comments in the margins of the exams were usually illegible, but the ones on the summaries and stuff were good and useful
- Did not understand the basis of the grading, and the stuff online didn't help b/c everyone has a different way of answering a question
- a)no
- I found the web answers useful, but I could not decipher the comments on the actual exam. There needs to be more space on the paper so that I can tell which ones I got wrong, because I couldn't even tell which were right or wrong most of the time. I just saw numbers.
- I looked at the comments on my tests and found them fairly helpful.
- this was the one part of the course i have the most confusion with. i never looked at a past exam b/c i could not tell at all what i did wrong, what the right answer was, etc. and the next exam did not even have to do with that info so i just moved on
- The posted answers on the web didn't help that much because I didn't always remember the details of my answers.
- I would have if we had the test back faster - as it was, the exam answers went up earlier and it was depressing to look at them then, and by the time we got our test back several weeks later I really didn't care any more and was concentrating on the next one.
- They were slightly ambiguous occasionally.
- didn't want to know how bad i did.
- posted answers weren't helpful until the exam was handed back....all they did was worry you cause you couldn't remember what you had written...they should be released at the same time
- I couldn't read the comments you put on my tests : (
- For the second exam, the answers weren't posted until more than a month later. It would be helpful to post the exam answers sooner so people remember the questions.
- When I left an exam I just couldn't think about it anymore, and the tests took so long to be returned that feedback seemed useless.
- A.yes, exam responses were helpful. I only wish they were posted sooner after the exam was completed, because then I remember how I solved the problems, where I was really stuck, and that's when I'm most interested in finding out the correct answer.
- whenever i checked the web before getting a test back, i felt like some of those answers came out of left field.
- they confused me
- I did not look at them because I wanted to know how I did before looking at the answers.
- Sometimes they were helpful, other times they were not.

18f Summaries

- I don't remember how I found my topic, but I did feel good that I could utilize the library to do literature research. It gave me more confidence in using the library.
- i thought the summaries were ok, i understood the reasoning behind the first one...not the second though... it just seemed like something extra for us to do and did not really relate to our gemone project
- i dont think they should have been due the same day as exams because it was just added stress
- I had a difficult time searching for articles. But now, after this course, it is much easier.
- My first article was approved, but then when I got my grade back I was told that it was not from Unit 2, making me very upset!
- I followed the examples on the web to the "T" and still received a poor grade. Its just frustrating.
- i really liked reading the article of interest. the other one i didn't like so much, but the first one (for exam 2 i believe) was really fun i ended up e-mailing the author to ask her a question and she wrote back which was neat
- All I really learned was how to interpret a journal article-I knew this before genetics
- i thought i understood how to do them, and looking at my comments on the first article, i tried to make the second one better....but i didn't do that well.
- ambivalent would be a better descriptor than neutral. I like looking at the articles, but found that the summaries I wrote weren't what you were looking for even though I tried my best to write them like the ones posted on the web.
- a)no b)looking through books c)yes d)no e)didn't go over how to write summaries
- They were ok, didn't see much point in either one. The first was just on a random topic, and the second, on the regulation of our gene, didn't appear in the final project so it seemed like a waste of time.
- Though we were given instruction, I feel like it was kind of limited in what exactly we were supposed to do. I feel the sample summaries were very helpful. I thought it was difficult sometimes to find a summary, and didn't feel like I got a lot out of it.
- i was not really clear as to why my summary was marked off, i thought i followed the example fairly closely and made my summary easy to follow but apparently not and i didn't know why
- I think I was a little confused about exactly what was expected. I assumed it would be a formal write up, but then i was told to say why this article interested me or why it was important. i felt juvenile answering those questions.
- i thought the article summaries were pointless busy work
- i feel like i can look at a scientific article now and be able to understand some of it. this is a very rewarding experience for someone like me who wants to go into a scientific field.
- The summary was ok - it was just too much on top of the rest of the stuff. I had a hard time finding the first article because I hadn't done it before and didn't really know what was going on. It was hard to summarize it and the sample one was good, but hard because we didn't know whta the article had looked like.
- It did help truly to practice searching in the library.
- we jsut do not have the knowledge base to do something like that. and preparing for those tests is bad enough, we really dont need more.

- i felt as though the first summary was not graded in the manner it was presented on the web....the second was graded similar to the first, so that was ok, but i feel as though we had no basis to write the first on and considering this it was graded to harshly
- I had no problems with writing the summaries but rather with finding pertinent articles, especially for the third section. Again, the time required to find the articles could be better spent working on problem sets or going to office hours.
- learned the hard way how to find an article
- I suggest you make the summary articles due like 2 weeks before the exam, not the day of the exam. It takes time away from the task at hand: the exam. And it was impossible to try to start early on them, because you would send us emails on what you expected from us, just days before the exam.
- In theory I had enough instruction on how to write, yet I seemed to be unable to replicate the format well despite my adherence to the examples. Also, for the second summary I was stumped on finding an applicable article and that seemed unfair.
- Web instructions were excellent. I think both articles I used were found by checking the works cited of other journal articles. I did make use of the sample summaries: having one (and the guidelines) in front of my AS I wrote my own summaries was extremely helpful. I think I got better at writing a good summary between the first and second exercises after seeing the comments on the first.
- i thought it was a waste of my time.
- I did not know what to expect writing an article for the first time, but I got the hand of it by the time the second one rolled around.
- I didn't think we were given enough instruction
- In the end, I felt like I had enough practice and information to find an article more easily and to write a summary of that article better.

19e. Summaries

- they were good
- when i could make the connection between the two, it was very beneficial when i couldn't, obviously, it wasn't
- A.yes - very b)yes c)somewhat d)helpful
- It was definitely hard to understand what was going on in a lot of those experiments, but I guess I benefited because I was better able to attack primary literature and try to understand it, which will ultimately be necessary if I go into research or something else. Being able to understand that jargon in the journals is important, and I think that looking at experiments along the way helped.
- I feel I have a much better understanding of the difference between results and conclusions.
- The emphasis on experiments was a different approach than I am used to, but it definitely helped me distinguish between results and conclusions and to know what the process of science really is.

- i have always been a person who asked WHY. this course was wonderfully tailored to meet my needs. understanding where the conclusions that we learn originally came from made concepts much much easier for me to learn and retain.
- It was just very frustrating and I felt like we didn't have that much guidance.
- the labs were very well structured. they took more than just a week often, as it is in the real world.
- I think the lac experiment was one of the best for clarifying the function/structure of the operon. I definitely saw the parallels between class and lab.
- Helpful and all.
- Being able to deduce the significance of a basic result is key in the scientific process, but it is important to distinguish the result from what it means. Problems in which we were asked to explain observed data were perhaps the most practical problems we were given.
- I learned a lot about the whole process of experimentation.
- It was definitely a reality check!

20h. BestLabs

- The Serial dilution was good b/c it was necessary in other labs, the plasmid DNA introduced us to gels, the fly lab taught us mendelian genetics first hand, PC-Fly was a waste of time b/c we just plugged in numbers and I thought that recombination was an easy topic anyway, the recomb/comp lab was good but really frustrating, the regulation of lac lab helped clarify what we were talking about in class- it would have helped me a lot to have done this lab right at the beginning of talking about lac b/c it was helpful to see the different mutants up close and see how they behaved, and I guess the Agro project introduced us to experiments and journals, but I didn't find it satisfying b/c for one thing, I hated my partner and we didn't work well together at all, and also b/c I don't think we knew enough about what we were talking about and we all felt like we were making things up.
- The fly lab was pretty basic, but was a decent effort to get us interested in research. The serial dilution lab, although beneficial to this course wasn't very valuable. The rest had excellent educational value and the agro project was a tough assignment that incorporated a lot of resources which we developed over the year.
- i really liked mapping the mutations using pc fly and the real fly part was useful to gain actual experience with real data and that's something that can't be replaced.
- i thought these labs were the most useful in analyzing genetics and its application in the world
- I found that both labs were very helpful as hands on experiences because i was able to see first hand the topics we had been discussing in class.
- Each lab touched on such a different topic that I found all rewarding to my genetic experience,
- these labs were the most interesting to me because they helped demonstrate the powerful uses of genetics and the beauty of the organization of the universe.
- Isol/Char of plasmid - because this is so common that it was necessary to do in order to understand many other things about genetics Fly lab - it was very cool to see the macro side - i like the bigger stuff E. coli plates just doesn't do much for me Recomb/complementation - because it related VERY well to what we were doing at the time which helped me to understand it much better Agro project - very cool - very applicable. i was kind of upset that it

wasn't worth more for all the effort put into it. and the instructors were telling us different things which was frustrating, but oh well.

- I felt that both labs related to everyday things. I was able to learn many aspects of genetics from both of these labs and apply them to life in many different ways.
- I learned the most from them
- basic skills-serial dilution interesting-recomb/complementation
- the lab was closely tied to what we were learning about the lac operon in class.
- We went over the concepts more in lab than class, so I had a good background when a question concerning this topic came up on the test
- reinforced what was taught in lecture and gave hands on experience with different types of experimental methods
- Because it gave us a chance to look at a real gel and try to figure out what everything was. It was interesting for me to see real DNA also and see gel electrophoresis, an important technique in research, live. The others were ok I guess. The Fly lab was pointless for me cause I had done it before and I think that it took too much time to cover a topic as easy as mendelian genetics. The PC Fly made sure I understood; I think the live fly project was a waste of LOTS of time. I thought the Agro project was very interesting, and it was rewarding for me to start with a page of ATGC's and finish with an experiment that could test the function of that gene. I also learned a lot about ways to do genetic research, ex, using plasmids, cloning, splicing, gel electrophoresis, etc. I liked learning about those techniques.
- I feel we discussed them in lecture and then got to see first hand what was going on in lab.
- these let me see actual scientific procedures performed everyday in the world of genetics and were easy to understand
- These are the labs that I got the most out of. The fly lab was a lot of time, but I began to enjoy it. recombination and complementation are major genetic concepts that were fully understood by me after doing the lab. regulation of the lac operon is another major genetic concept that I think everyone in science should understand.
- Isolating DNA and performing recombination and complementation tests were two useful labs because they brought to life concepts learned in the book and in class. The fly lab was useful because it gave me an appreciation for doing ongoing, lengthy experiments and for working with organisms.
- They were interesting and clarified some of the more confusing aspects of the class.
- all of the labs were helpful to me. they all had some aspect to them that allowed me to apply what I had learned to other areas of my life, and they demanded that I think and work through problems. I liked that.
- The fly lab was valuable only in the sense of satisfaction upon completing it. The other two were valuable because I felt like I walked in not really knowing what I was doing, but afterwards I understood the concepts much better.
- These three were interesting to me. the flies were cool for about 3 days, then it was just too much because we started to realize how much work it was going to be. PC-Fly was cool, but I didn't understand it. I chose the three I did because they gave almost immediate results and the concepts were new to me and challenged me.
- easy to see and understand results and then process (as way of results)

- most interesting, understandable and exciting results
- These labs helped to make the connection between learning concepts, doing them, and then explaining them in relation to the results.
- we directly saw what was going on with genetic inheritance.
- I don't know why really.. I learned a lot from all of the labs but the process of writing those long lab reports was really tough.. the fly lab report definitely tested my organization and time management skills, as well as looking at real data and drawing conclusions from it
- I really felt like the T4 experiment was useful to understanding genetics and the ideas covered in this course, of course fruit flies are standard, but I didn't get much out of it, except for the mapping from the pc-fly, and the crosses we had to do for it, and the lac one, really clarified the regulation and it should have been done before exam 3
- Even though the fly lab was a lot of work I thought that it was a good way to bring a lot of genetics principles together and make them more understandable.
- This enabled us to perform a long term genetics experiment in action. It made use of many of the concepts we had learned and we discovered that results sometimes don't make too much sense at first but you can always find a way to make some sense of them in the end
- The recomb/complementation and regulation of lac operon lab were good because they weren't terribly time consuming, made sense to me within the context of class work, and were generally interesting.
- doing the r/c and lac experiments helped for the tests the dna one helped illustrate plasmids and the difference between plasmid and other dna the fly lab helped me to see how inheritance works, etc. I could apply what we did in class to the experiment because it was ongoing. some of the other labs were done before we talked about the concepts totally in lecture
- the fly lab made you feel like a real scientist, experiencing all the frustrations the regulation of lac had clear results which helped me understand the lac operon a lot better the agro project was just interesting all around, the poster was particularly fun to do once we figured out to do, more instruction on the posters would have been helpful
- This one had clear, understandable results without demanding an absurd amount of time out of class or leaving me confused by the concepts being taught.
- The plasmid isolation lab introduced us to important concepts of molecular genetics and the extent of its applications. The fly lab showed us how Mendelian genetics really works and how it can be applied to any species. The lac operon is obviously one of the most studied DNA sequences ever. Understanding its regulation is key in understanding several other regulatory mechanisms in bacteria as well as in eukaryotes. The Agro project gave us unexplored data with which to investigate and from which to draw our own conclusions through becoming familiar with the genetic tools available to us.
- those were the hardest concepts for me to grasp, so the lab was positive reinforcement for me.
- these really tied in well
- Got to examine inheritance on a macroscopic level. It was really neat to take what was observed in the live flies and then apply it to virtual flies in order to find precisely where the mutations were.

- I liked the concepts that these experiments addressed and they tied in directly to class discussions.
- The Recombination/complementation lab gave me a understanding of recombination. I did not receive that a high of a grade on the lab report, but once I went back and asked questions, it all became a lot clearer to me. The fly lab was such a valuable experience just because it became so personal. It was MY responsibility and five other people were depending on me. And A.yes, I never thought I would be able to identify alleles and locate them on specific chromosomes. With the agro project it was just exciting to actually create experiments.
- I think that the Fly lab was the most valuable, because not only did we get actual hands-on experience, but we also had a chance to see what real scientists have to deal with when they are planning and conducting experiments (bacteria, obtaining pure cultures, etc.) The Agro project was really good because it allowed you the opportunity to plan your own experiment and to go through all of the processes that real scientists go through in trying to convince the public that what you have found is important to everybody.

21h. WorstLabs

- See above
- See above
- i feel like it was an add on that wasnt very helpful or related to anything - i felt like it was busy work and esp frustrating bc it happened at the same time as the fly paper. the work we did on our mystery sequence throughout the semester did not really help me with the actual project part at the end.
- i still dont understand it
- none
- very long and reports were due at the wrong time in the semester!
- WAY TOO MUCH BUSY WORK
- i think it could have been a lot shorter - more condensed
- Important to know about dilution, but don't need to spend an entire lab on it
- i thought all the labs were valuable...i could see the relationship between class and the lab very well
- This lab was more of a hassle than anything. The genetics analysis that we did with the real flies could have been done on a computer. All of the lab reports were very stressful, but this one especially!!!
- Everyone understands this concept
- Fly- When people are unreliable and don't get you data it makes your life hell. Here we are in the crunch of the semester and i have to worry about if i am going to get data in time? I think that you should start out the semester with this lab. Also... many people just made up data, how scientific is that!? Agro- The articals are in greek and half of the ones that are needed are not in this library. What was the point?
- good warmup i suppose

- See above. I think the fly project was a waste of time, especially because I had done it in high school and also because Mendelian genetics is easy. There is no need to spend so much time doing real flies if the concepts can be driven home using PC Fly.
- I feel as if it wasn't very well explained what we were supposed to be doing, and we didn't necessarily understand what the role of our gene was, which made doing the project difficult.
- this project was extremely frustrating and i didn't feel like we had enough guidance without having to keep asking for tons of help to complete it. we really weren't sure how to coem up with an experimetn b/c we don't know possible ones like scientists who do this stuff everyday do. i felt like i just had to make something up.
- repetitive, kind of confusing, seemed somewhat pointless
- Regulation of lac was split up into so many groups, I didn't get much out of it. The agro project didn't require that we perform an actual experiment, which made it so I didn't get much out of it. PC-Fly, to me, was obvious, and so I didn't really learn anything from it.
- way too time consuming...stuff i already knew...extremely pointless
- By the same token, the fly lab was very time-consuming and difficult.
- It just felt like there wasn't much too them conceptually.
- they just took too much. Agro confused the crap out of me and fly was so tedious. dont think i am a slacker and dont want to work, those labs just got annoying.
- way too much work...same point could have been on smaller scale experiments
- I think that the PCFly should have been better explained. The manual nor the in class instruction was very clear or helpful.
- pretty complicated to understand
- i think everyone made up numbers.. those flies were so messed up.
- I don't really have an opinion on this
- I don't really understand why this was important, all I did was use the computer to research and analyze
- I don't think these were not valuable I just did not enjoy them as much as other labs.
- I found all the labs to be valuable
- As far as the fly lab, I like the idea behind it. I think it's great for demonstrating genetic inheritance, mutation, etc. But I have never been so frustrated with a project in my entire life. I would estimate that I spent upwards of 100 hours on that lab alone, which seems to me to be a bit excessive. However, I don't know that another lab could better suit the class. It's a toss up. For the agro project, I think it was nice to work through all the steps of identifying the ORF, finding a protein, finding a gene, and devising an experiment, but I don't feel like i really gained anything from the process other than frustration when we couldn't find a relevent gene. I much prefer hands on labs than computer labs.
- It didn't even work out the way that it was supposed to and it required a lot of time outside of the classroom
- i didn't really understand serial dilution until later labs when i had to apply it to get a result to come out right. doing the prep work for that lab was really hard. i was unable to plan out the dilutions on paper. i only understood it when i was actually doing it. pc-fly seemed more an exercise in using a computer program. i didn't really get much out of it. the locations of the

genes didn't seem very important in the big picture of the lab. but maybe that was because my traits were x-linked so i didnt really need the program to tell me what chromosome it was on. also the directions for the program barely made sense even when i knew what i was doing. i had to have paula walk me through it. i didnt find the agro project very interesting or valuable. i didnt really understand what all the computer programs were doing and what those results meant. the poster though was the easiest thing i had to do for lab all semester.

- Too much work, with little gain
- My sequence was just too irregular- too short, no promoter or operator, weird regulation- to be useful in any real sense since I struggled through every step and still don't entirely understand the stuff that's on my poster. The agro project was mostly just a stressful pain.
- The serial dilution lab was a good introduction to writing lab reports, but it was not high in content.
- I wasn't the biggest fan of the fly lab but it was a good vehicle to move us into other methods such as PCFLY which helped me understand things greatly.
- i still don't understand serial dilutions.
- i thought the agro poster was like busy work.
- pointless
- Didn't really appreciate the scientific value of this experiment.
- I thought that these processes could have been addressed and applied in another lab.
- I understood how they all related to lab/class but in the end I don't feel like I learned much from them. PC-Fly was a waste of time.
- With the isolation of the plasmid, I was seriously confused. From reading the gels, to having the bad data, it was a bad experience from the beginning to end.
- I thought these assignment were valuable but the work required for them was excessive
- I didn't really find that any were not valuable, just a bit more tedious and complicated.

22c. LabConnection

- I think that Paula made the class bearable for myself
- i didnt really understand what we were doing at the time, but now that i look back, that lab was useful and informative.
- it was i guess...i didnt understand what were were doing though...i just did it
- mostly, A.yes - sometimes i thought not
- A.yes b) A.yes
- A.yes, I really liked that lab even though it was hard to understand what we were doing at the time. IT helped to see how to separate cell components and how to run a gel, because gel interpretation was such a big part of the rest of the class.
- i can't really remember it did introduce gel electrophoresis to us, which is important.
- very nice connection between lab and class.
- Not really - it was ok, but seemed to be just a procedural, and not as much conceptual in nature.

- the lab was more work than the class, too much time was put into it; and i don't feel as though my grade will reflect it.
- I didn't understand what I was doing before or after doing it
- it taught you the basics
- The labs were the best part of the class in terms of teaching me.
- Lab clarified many concepts discussed in lecture. (see previous 'usefulness' question)
- This was not one of my favorite labs, but it was useful.
- I can definitely say that I liked the fact that lab corresponded with the lecture portion so that you had a chance to visualize the concepts that you were dealing with in lecture. I didn't really see the importance of lab 2 until we had reached close to the end of class.

23c. Write Reports

- A.yes
- Writing to the point and to the scientific question at hand.
- i think i know how to write a lab but often i was so rushed that i didnt properly demonstrate that.
- i definitely feel i can write a lab report now
- i dont have any problems writing them now
- for brad's lab we didnt get any of our reports back except for the fly progress report- we understood of course because of the baby yet it was hard to know how well we were doing on writing reports
- The questions provided throughout the lab manual.
- i still feel pretty inadequate but the questions helped from the first lab
- Lab reports are coming easier to me now that I have worked on them all semester. I have to write a journal article for my research project-I think the genetics lab will help me to do it much faster b/c I have already learned the foundations
- the story-telling analogy/aspect is very useful
- A.yes b) A.yes c) A.yes
- I don't know if the first lab helped in writing the others, although it was nice to have the lab write itself. Writing the labs was the most difficult part of the course I think.
- Having the first lab helped set a base as to what was expected. Though I by no means feel like an expert lab writer, I think I have a better understanding of how to do it now. The comments on my graded lab papers helped a lot, also meeting with my lab prof. helped.
- i wish there were more commmetns about how to improve my next lab, even if the one i just received was good, b/c i'd like to constantly improve to get more clear and concise
- the guidance from the first lab really helped me understand the general idea of writing a lab report. the guidance from the lab manual was very useful.
- I would have been lost with out the outline for the first lab report.
- the end part of the lab report where it was told to us what to put in the lab
- the first lab didn't really help me much. the second lab taught me more of what i needed to do. however, now i feel very confident in writing a lab report.

- The series of questions was incredibly helpful since that was the first real lab report I had ever written. However, I didn't feel ready to write the second, and I still struggle every time I sit down to write a lab report.
- just continually writing them
- I knew what kinds of questions I needed to answer in my report.
- lab sucked
- yep--I am much more confident in my scientific writing style as well as what goes in each section, how to deal with data, etc.
- The questions for the first lab were good, to model the rest of the lab reports on like which questions I needed to ask myself
- I really liked having questions in the lab manual. When you're writing a report, there are sometimes things that you forget and the questions helped me to focus the report and concentrate on what was important.
- The suggestions on the web and the examples of good lab reports helped a lot
- the fly progress report helped. all the other lab reports were more painful to write. i thought having to write a lab report on simple dilution schemes defeated the purpose of writing a lab report. it was too simple to write about!
- i feel like i can now write a good lab report and understand what goes into each section
- I did crappy on the first, guided report because it was too guided. When i could write naturally and had an idea of how to go about it, I did much better on subsequent labs.
- The serial dilution lab was a good introduction to writing lab reports and I felt comfortable with the format.
- I think i am much better at writing lab reports and understanding how to go about things. Unfortunately i think i would have fared much better to be able to present it to you in a discussion format face to face because i get lost as to what to say when in a paper. though i know writing papers is an integral part of science.
- i know i will keep my lab manual for future reference when writing a lab report, because the breakdown was very useful in helping me understand what is what
- Getting more experience writing lab reports was useful
- trial and error helped me the most.
- the labs took a long time to get back, which made it hard to use the feedback for the next lab. also i think i sample lab report would help because i was often very confused with how to write certain portions of them
- Planning out the first few labs for us and then giving us less and less direction.
- I've known how to write lab reports since High School. They were nothing new to me.
- c. It was useful to just keep writing lab reports. The more I wrote, the better they got. Plus, seeing Dr. Lessem and showing her rough drafts helped incredibly.

24c. LabPreparation

- I don't feel like writing anymore...this survey is too long.

- i generally did not have a clear picture of what was going on until my lab instructor gave an overview.
- the quizzes made sure you read and understood the ideas behind the lab
- These elements were very helpful for me
- I still was confused on some of the procedures.
- i have no idea. sometimes i felt like i had to read the thing 4 times to totally understand it - even after i'd done the lab - i thought they were confusing
- I never felt like i knew what was going on until after I wrote the lab up
- sometimes more than others...coming in for help before the lab so i knew what i was doing
- talking about the lab before starting the actual experiments was helpful
- A.yes b)yes
- Again.. you have us wading through all this muck that is hiding the purpose and other valuable data... almost everyone walked into and out of lab not knowing what was going on. We were all clueless until a good 20-30 min decoding with the lab prof.
- Wasn't usually prepared for the depth of the topic that we got into. I usually figured it out just fine eventually though, so that was fine. The quizzes didn't help at all.
- Sometimes I felt a little confused, but as soon as we got going I figured it out. The prof. was extremely helpful also.
- more of a summary of what was going to happen and what we would expect right before starting the lab
- i think it was just hard to understand concepts before they were explained in lab.
- nothing could have helped really except for a less confusing lab manual
- good prep for lab.
- I never felt like I was prepared for lab, no matter how many times I had gone over the lab manual and the instructions - it was only the instructions given in lab by Dr. Lessem that helped me understand the lab.
- lab manual often was confusing
- i did not understand the experiments
- thoroughly reading the lab as suggested
- Often I would take the quiz and have no real clue as to what was going on. I would read the manual carefully, but somehow the questions on the quiz would be a problem.
- the quizzes helped
- Clearer intro and instructions in the manual
- maybe we would be better prepared if we took a closed book quiz at the beginning of each lab
- I think that all labs are confusing until you actually get into the lab, see the materials, and start working. Sometimes written instructions just can't explain a procedure like a demonstration can.
- The quizzes made me look over the lab which is something that i usually "forget" to do
- i had lab early in the week, so sometimes we only talked about the concepts after i had already done the lab

- I had lab early in the week and when we did the lac operon experiment I think we still hadn't covered it in class, or that happened with at least one other experiment. Lab was useful, just ill-timed.
- The quizzes prompted us to carefully read the lab manual so that we were prepared upon coming to that day's lab. Sometimes I was a little unclear about a few points, but the pre-lab lecture usually eliminated my confusion.
- I wish I would have known a little bit more about the topic we were discussing in lab from the actual class because I think I would have been able to take more away from the lab that we were doing.
- I don't know
- If I do a lot to prepare then yeah, but if not, then no.
- Dr. Lessem's outline of the procedures and methods in the beginning of lab helped a lot.
- I was sometimes confused about procedures
- I think that it would have helped if the lab teachers would have spent a couple of minutes the week before explaining the next week's lab, as just reading the stuff didn't mean that you understood fully the purpose of the experiment.

25c. LabManual

- very good manual!
- when I could understand it
- This was the first science lab I have had where I feel like I am actually doing experiments, I feel like lab has a purpose
- A.yes b) A.yes
- It was well written, down to our level, and the introduction had lots of beneficial information that helped me understand class topics. I liked the lab manual a lot.
- It gave an overview of the exp. and its concepts, along with the procedure. I also liked the guidance it gave for writing the lab reports.
- I was VERY impressed with the lab manual. It was my bible this semester. It was entertaining and it explained things clearly when everything in my life seemed confusing.
- The outlines in the beginning of each lab were very helpful, and the background provided was too.
- very confusing setup
- presenting all key info on the first page was great. This really helped me to focus.
- The boxes were very helpful - the content helpful, but I really didn't understand things until I walked into lab each week.
- the outline of the knowledge and dates was very helpful
- it was helpful sometimes
- The only improvement that I can think of is adding more questions that we could address in lab reports.
- it read like a story explaining things very well, it wasn't bogged down with scientific terms
- Writing lab reports was mostly just time-consuming and tedious more than difficult.

- A.yes; The outline kept me informed of the time frame I would be working in; The goals for the lab and the 'what to do before lab' sections were especially helpful in preparation.
- especially the section on writing a lab report.
- The lab manual was put together very well.
- It helped out with writing papers and just giving me a better understand of the labs.

26c. LabWork

- We had some big reports to do and combined with the lecture...I spent approx. 75% of my academic capacity (time and energy) on geneticed alone.
- too much - agro project wasnt necessary. the 3 weeks with work due in a row wasnt too great either esp considering that most studentd are in another lab that require weekly reports.
- lessem is great!!!!
- lab was a lot of work...i did more work for this lab than i did for almost all my other classes together this semester...and i took 17 credits
- so much work!!!
- WAY TOO MUCH WORK FOR A LAB. I actually found it quite ridiculous. Timing of assignments was bad too. Too much going on at once, along with exams in lecture.
- all in all - there was a ton of work for genetics as a course - mostly in lab, but when combined with class it just made it all the more heavy
- Lots f work writing the labs, but I enjoyed it and thought that I would not have learned as much if less was required
- i think the lab should be worth even more for our overall grade, because of the amount of work involved in writing reports. but that is different for everyone...i am really slow at writing reports.
- Why should lab be so much work than lecture? I would have to spend days writting those reports, which made me neglect my other work if i wanted to get the lab paper done.
- normal - ok b)excessive!
- HUGE amounts of writing and lots of time spend outside the lab. The lab was the most challenging part of the course because it required more time than the actual class. I felt like genetics was actually two classes, class and lab. I have never done that much writing for another class, let alone just for a lab.
- If the labs are going to be this much work, I feel they shoudl be given more credit. The work I put in definitely deserved more than an extra credit hour than normal classes.
- lots of hours to write labs!!
- I just think that for 4 credits, the lab (combined with lecture) asked too much. maybe that is because i spend too much time on lab reports. but i basically spent most of my time on lab stuff, which seemed odd.
- Writing most of the lab reports was a very long, tough job, but there weren't very many to write.
- too much time outside of lab required for flies and paper writing...dont forget we take other classes besides genetics

- Lab was A LOT OF WORK. writing the labs took a lot of time. i don't know what could be done about this though. i really learned alot from writing the lab reports. i would say not to change this part of the course.
- I have never been so stressed and overwhelmed in my life. LAB reports and lab work took so much time and espeically for a few weeks there, we had a lab report due every week and I was so overwhelmed because they took so much time and I had so much work already to do.
- LAB: AHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH (thats a scream)
- this lab was ridiculous; i have a sickening feeling in my stomach when i think about it.
- i spent SO much time doing lab work for this class.. way more than for class
- Labs made me hate this course...i spent more time on lab stuff then i did on anything else that should never be the case....shame on you all
- Overall, I found lab work a bit heavy. For the fly lab, I found the amount of work to be excessive. As it is, we only get one academic credit for lab, but to spend three hours a week actually in lab, another few outside of lab preparing/collecting data the day after, and three to four hours writing a report is definitely heavy.
- lab papers were always really long
- I wrote more for this lab than I did for any other of my humanities (even English) classes. Also, having to get up at 7 am for flies was never in my game plan; work outside of class time should be more flexible; we're busy and tired people.
- Well, the fly lab pretty much made this question:) The time spent outside of class for THAT lab was definitely excessive. However, coming in to count colonies on plates or to observe complementation was not too extreme. Writing the reports took the longest, depending on how much effort you wanted to put into them (I cared a lot).
- I realize that lab reports are an integral part of science but i felt that i got bogged down on meaningless things. Sometimes i felt there may have been better ways to test knowledge of the subject.
- It was heavy at times, not so much at other times, just depended.
- The B-Galactosidase Activity lab was very long. I think in the future only the Fly Lab OR the Agro Project should be done. These were both very time consuming.
- Lab in combination with lecture required all of my time.

28b. TeamTeaching

- disadvantage: discrepancies between labs advantage: different styles that may appeal to different students
- highlight differences however if u feel more comfortable with one person, when the other instructor is teaching, that can be frustrating
- disadvantages- when you guys told us different things advantages- if one teacher wasnt clear you could go to another, better grading of our exams, papers, etc
- Each professor had a different style and this made it interesting.
- variety.

- i don't think it mattered to us who was teaching it, but it mattered to y'all because one of you (i assume) knew more about certain subjects advantages were two different opinions on some things. disadvantages were that there was some inconsistency, but not bad
- +=always had someone to talk to when i needed help able to get 2 opinions on problems - =seriously did not have any
- different styles, and both sections were consistent with how hard the class was
- variety is always good
- A.yes b) getting different views on topics
- it was nice to talk to one of you if another wasn't around. otherwise, i don't mind.
- I was better suited to Brad's style, so sometimes I would have preferred him teaching more.
- I liked getting two perspectives on topics, and having variety.
- two totally different styles and web notes sometimes one went more in depth and covered more it was kind of hard to keep switching back and forth b/n styles
- i think brad and jeff complement each other very well. it was a little hard getting used to each specific teaching style, but i did like having more than one resource to go to for help. if i didn't understand one, i could always go to the other one. sometimes i understood one better than the other. the major disadvantage was that sometimes i felt that they contradicted each other, as far as assignments were concerned (ie - the poster).
- I could get two different perspectives (3, counting lab) on concepts with team teaching, so that helped me understand some concepts better
- each had such a different style of teaching...made class more confusing.
- Different perspectives and different methods of teaching.
- trying to bounce back and forth between profs was hard at times. however, i think that the different teaching styles of brad and jeff allow most people to be able to relate to at least one instructor and thus gather the most info from the course.
- In some ways - the only difficulty was that I had a hard time understanding the ways they were explained sometimes.
- hearing two styles is hard, but two points of view was very good.
- advantage: having concepts explained multiple times by different people helped with getting a tighter grasp on them
- It was difficult at first to get used to switching teaching styles every few weeks. Each has their own strengths and weaknesses.
- got different styles of teaching
- i was finally used to one's style of teaching. then it would change. i spent the first half of the semester adjusting to y different teachers. it was terrible.
- I like the change up of teaching styles
- each instructor had their strong points that appealed to different strengths and weaknesses in each individual everyone learns differently
- Its expect that some students will take to one teacher over the other, and adapt to their teaching style. Therefore I felt I learned better from one, and not the other. So, in this regard I

think that it was not a good thing. BUT, it was nice to see 2 different perspectives on issues, and I found that if I needed help, one of yall was always around.

- Sometimes the team teaching was good for the course and sometimes it wasn't. Sometimes there were discrepancies between answers and responses given by the instructors.
- provided us with different looks on the concepts we were learning made it less boring
- I liked the dual perspectives. Also, it was nice to have a change once in a while and also good to have two people to go to for help.
- The different teaching styles sometime threw me off but in general t was advantageous
- 2 different teaching styles but by the time i got used to one, we would switch again. maybe teach half and half instead of alternating?
- adv. each was good at teaching their section of the course, could go to either for explanations
- With two people I think we got more info than we would have otherwise, but at least tehre was someone else around to help.
- It's good to experience a variety of teaching styles and to be able to learn from all of them. Sometimes I prefer one kind and would rather stick to that.
- if you didn't understand one person there was the chance that you would understand the other. on the other hand, when you realize which person's style better suits you, it is hard to adapt to the change.
- Different styles of lecture were difficult to get used to
- two different perspective but also two completely different teaching styles to get used to.
- different perspectives were gotten on subjects, but its hard sometimes to switch back and forth between teaching styles.
- Advantages: New viewpoints in regards to problem solving Disadvantages: Felt overwhelmed a lot
- Different approaches to satisfy different types of learners was good, but only one of the types helped me a lot.
- Advantages: You could ask more than one the same question to get their perspectives. Disadvantages: Sometimes responses on what exactly students were supposed to be doing was different; which is confusing.
- A.yes, it brought two different perspectives to the course and when seeking help, it provided more options. One disadvantage is that you would get used to one style of teaching and then it would be switched up.
- No - I think for this kind of subject consistency in teaching styles is key. Brad and Jeff do not employ the same teaching styles, and it was difficult to switch back and forth.
- I think that it was advantageous because certain concepts, and sections one teacher was better at than the other and it gave you a chance to experience how it really is in the world where you have to adapt to the way more than one person does things.

29. What'sHot

- problem solving skills. That is the bottom line and what I feel I learned from the class. I feel that I have only obtained a rudimentary understanding of any genetics principles, but that my problem solving skills have increased greatly

- I think that I gained more confidence in my work in this class but I wish it had been a more structured class with more background/definitions b/c I didn't know anything about genetics before this class. I felt it was easy to go to Brad, Jeff, or Paula for help, regardless of whether or not I was in their lab.
- This class is very beneficial to me academically and I will no doubt rely upon the skills that I have learned and developed in the future.
- I made it! That gives me so much confidence and pride. My problem solving and analytical skills are as good as they've ever been.
- this was the hardest class that i have taken here, but i feel prepared for the classes to come. it has made me use the information i know and come to a conclusion.
- i am satisfied that it is done. i think it will make my problem solving skills better.
- i think im well prepared for any other science courses i take. especially in the way of lab reports and critical thinking
- i think the group of us as bio majors have a bond know and we are all proud and glad we have made it through this course which was very helpful for problem solving skills and learning to grasp the full picture- i think it was the best class and definately the best teaching i've ever had despite my stress complaints
- It is almost over and I did it. I have almost completed the tasks set by the genetic gods....
- this course is a true test of remaining sain while dealing with lost of new information
- I liked learning about real life examples. It made the information learned in class more interesting. Ex. Cancer
- it was definitely the hardest class i've taken so far, but also the most satisfying - i've learned more in this class than in any other - especially the practical aspects of it.
- I loved the fact that I learned how to think in a new way. It was a TON of work, but I have never felt so rewarded by my efforts. I feel that no other class will ever top the way i feel about my experinences in genetics.
- i think this was the hardest class i have ever taken...but i don't think i have ever learned this much. I am very satisfied with this course!!
- if you can conquer/survive Genetics, you'll be in the clear for at least a couple years
- The lab really helped me the most, followed by the review sessions with the faculty b/c it was one-on-one My background in genetics will help in the future (classes and job)
- problem solving, not even in genetics, will forever be useful. learning how to tackle a problem is something anyone needs.
- I liked learning about the laboratory techniques and how research is done. I feel satisfied because I made it through the course intact, and I developed a work ethic because the work was so great that will help me in other classes. I will never again complain about a course after genetics.
- I liked the way it forced you to think abstractly, which will definitely help in the future.
- i feel like my critical thinking skills have improved dramatically.
- this class improved my problem solving skills, tested my endurance, and challenged my stamina. i feel that i understand the scientific world much better now - in a realistic sense.

- I liked the format of the course--online quizzes, class notes, and tests focusing on problem solving. I have gained a greater appreciation for science in general and for research especially from this course, and it has only reaffirmed my decision to be a Bio major.
- i liked the topics that were covered...dont really know when i will use them next
- Genetics taught me how to take what I've learned for the past three years and use it in a different way that leaves me feeling that I now have a more complete picture of the material.
- my experience is most satisfying in the area of research articles. i feel like i have some connection to the world scientific community. This is a very rewarding experience. I also really liked the problem sets. I really feel like i have increased my analytical thinking 100 fold. THANK YOU.
- The only thing that really makes me satisfied is that I survived.
- problems solving skills is what will help me the most - also working iwth my peers...
- i didnt know a thing about genetics, i do now. i have the broad idea, and my aunt works in cancer research and now i can talk to her about it, which will be very cool. i really learned so much this semester, even through all the stress
- i feel like i learned a TON about genetics this semester. i also feel much more competent in terms of approaching complicated problems and working through them as well as in doing lab work.
- The power point slides for lecture are extremely helpful. It is great to see what is happening in certain experiments and concepts.
- I think it was like experiencing the hardest and now everything else at UR will be easier.
- the most satisfying thing about the genetics experience is that it's over, and that i did it.
- i definitely feel like this is the first science class that I have really had to think in--I wa beginning to think that i would be miserable all through the major. And A.yes, the skills I learned are definitely going to help me later on.
- I feel like lab helped a lot in clarifying the concepts learned in class I also do feel like the problems have made me a better problem solver I feel like I have more tools in my tool kit, even if I can't solve every problem at least I have an idea of how to go about doing it
- That i was challanged and i did it i know i can do any assignment or work load after this class i think this class prepares me for the rest of my life
- It makes other classes seem really easy!
- I think that the focus on solving problems and the heavy workload will help me in developing my scientific skills as I progress through my major at UR.
- this course taught me to think differently and I think it will prve to be very useful in other courses I take and also in everyday life
- Problem solving skills- no other sciencs course i have ever taken has approached the subject like this class did....memorization of facts and general knowledge of concepts is useful, but problem-solving skills are more advantageous in the real world...although i struggled through many problem sets and test questions, the sense of accomplishment i achieved upon finishing them made it all worthwhile
- I like the material. Genetics is definitely my primary bio interest. Keep the same topics and units.

- I feel that I have definitely conquered THE hardest course at this school. It helps to know that I could get through this course because I truly doubt that there is anything else at this school that is anywhere near the level of difficulty of this course!!
- i don't think i will ever complain about a hard test again.
- the problem solving skills i gained are valuable
- Pure lecture class, no problem set days, shorter tests
- Genetics has been my most challenging course yet here at UR, but i also feel it has been the best. We were submersed into the world of genetics on all sides and that made us learn it if we were going to survive. Doing the problem sets has increased my ability for critical thinking ten fold and i now feel i can at least approach difficult problems and begin to figure out what is being asked of me. This will be a big help in the near future and long term. One of the most useful things i think i have gotten out of the course however is the fact that it has increased my desire to know more about genetics and biology in general.
- I learned a lot of cool stuff, esp. about mutation, and now no other class can seem too demanding in terms of work cause it would have to be less than this class.
- I am a much better thinker; I am confident that I can struggle with problems but that I can come up with some kind of answer.
- I like the idea of problem solving and using what you have learned to answer questions.
- i liked how the class was more focused on what we did on our own outside of class, and the questions we brought back. i feel like the problem solving was very useful to me. and taking a test for 3 or more hours has given me a better attention span.
- The lab experience was really useful. Lab reports were much more sophisticated than previous lab reports. Overall, I really enjoyed class and felt that it was very stimulating.
- more than anything, i learned how to persevere. this has been a difficult class for me but i was able to do it. i may not have gotten straight A's but i worked my butt off. that counts a lot in my book!
- genetics seemed very helpful in preparing me for future bio courses. It taught me how to study, solve problems, and write effective lab reports.
- Increase in critical thinking skills
- My problem solving skills are much better and lab writing skills.
- Analytical thinking.
- Genetics went from impossible and irrelevant and boring to "hey I can do this", "this is interesting". I'm proud to say that I made it through, and with a respectable grade. I am extremely satisfied with this course. I really liked the fact that ALL professors involved care so much about helping student and are so involved. This course would definitely not be the same without all the time and effort put into it by the professors.
- My problem solving ability has gotten much better

30. What's Not

- amount of work and the feeling that no matter how much work you put into the class that doesn't mean that you will succeed

- It was sooooo much work and a lot to handle along with other courses. It was difficult to juggle to science courses at once because each is demanding and time consuming.
- I feel like my grades dont reflect the effort ive put into the class.
- it was just very overwhelming and a lot of work. i felt like my other classes suffered just because of this one class.
- the enormous amounts of stress that it caused with all the work we had to do and the 3 hour long tests. none of my finals have ever taken that long!
- nothing
- this semester was complete stress mostly b/c of this class but also b/c of taking organic at the same time- i can not say i have enjoyed myself much this semester- lots of weekends spent in my room or the library doing work
- Little feed back on problem set answers but that may be my fault.
- too much info. It could have been more productive if we'd worked just as hard, but covered less.
- I HATED the amount of work that I had to put into this class! I felt as though my other classes suffered because I was always doing work. I would come home from a 4 genetics exam and have to do the reading for the next class. The work was always there and we never got a break!
- Too much work for one course. It felt as if the instructors believed this was our only course for the semester at times. It shouldn't be like that at all.
- it was a lot of work - and hard work, at that - but i suppose that goes along with 29
- The only bad thing was that some days there were so many topics that we did not get to most of them-they always seemed to be the topics that I need help on
- lab reports
- The excessive work load in lab and the over emphasis on problem solving. You can't be a good problem solver unless you truly understand the material. The first focus should therefore be on teaching the material. I did not sign up for office hours to learn the material when I signed up for the class.
- not going over problem sets
- Too many lab reports written up - too tedious
- I think that i have said enough... i can't gain anything when i have to decode everything that is givin to me
- Huge amounts of work, to the point of being ridiculous. I basically had no life because I was always doing work, most of it for genetics, and my other courses suffered in the amount of time I was able to devote to them because of this class.
- I didn't especially enjoy writing the lab reports, but I could just be saying that cause I just finished the fly lab report. I feel like I got a lot out of this course, and have a much better understanding of genetics.
- i feel like i never really knew what i did wrong and how i could improve on future tests and assignments
- it was draining!

- I did not like the frustration I felt during tests, but now that I have completed the course, feel that the course has taught me how to combat frustration like that on any test.
- way too time consuming...ridiculous amount of work
- This class was very difficult and the problem sets were time-consuming.
- I AM THOROUGHLY SATISFIED WITH THIS COURSE.
- I have never had so much work in my life, and this was just one class. It was way too overwhelming and involved too much stress and too little sleep. I got so frustrated and I think that took away from the value of the class.
- That I still don't understand and haven't MASTERED some of the topics covered
- the class absolutely kicked my butt. never been so exhausted. again my fault i am an athlete and that makes it double as hard, but its still probably the hardest class the school has.
- i still feel like i could have spent so much more time on each topic getting a tighter grasp on it and exploring it further. i wouldn't say that's any flaw in the course - just the result of the fact that we only have a semester to cover the material.
- way too much work
- I think i most disliked the summaries. They seemed a little useless to me.
- I don't feel like I completely understand Genetics.
- It ruined my semester. i was spending too much time on genetics, i don't feel like i put my best effort forth in my other classes because of it.
- I feel least satisfied in that I never really addressed what I got wrong on the exams, and that I spent SO much time on lab work that really didn't have that much of an effect on my grade, although it did help me understand class material better
- I feel like I learned a lot; however, when I was in the midst of it all I felt like I was in a cloud of confusion. Perhaps having the goals of the course more clearly laid out, like what the syllabus for the whole semester would be, would have been helpful, at the time the sequence didn't make much sense
- My performance
- Sometimes I felt that the course progressed too quickly or that sometimes topics were rushed through.
- I think the workload was a bit excessive for the course overall
- The fact that I will be taking the MCATs.... and, from what I have heard, U of R students historically do not live up to their potential on this test...one reason is that the teachers here ask us to think, rather than memorize.....while this is the more ideal method of teaching in my perspective, it is not going to help me on the MCATs
- The time involved -- I know that assignments/out of class work/labs could be shortened and not lose the basic idea.
- My grade is not going to reflect the amount of work I put into this course. I probably worked harder and put more time into this course than any other course at this school, yet it is definitely going to be my lowest grade of the semester.
- even after the test i didn't know if i understood the material. i thought the tests were too long, i feel like they are designed to take forever. i really dreaded the exams. i felt it was really difficult to prepare for them without doing a study group with friends from class, maybe

because i couldnt make it to many of the help sessions except the ones right before the test. when i got home after the tests, the last thing i would want to do is prepare for lab the next morning. i thought genetics took over my life. i think if i had done all the work i was supposed to or should have, and when i was supposed to and should have done it, i wouldn't have been able to do other homework compared with other 4 credit classes, there was a lot of stress and agony.

- all the work, my other classes suffered because of all the time i put into genetics
- TOO MUCH WORK and TOO LONG, TOO HARD EXAMS- i don't think my grade reflects how well-prepared I am for fruher bio study, more so how prepared I am to be a geneticist.
- How I feel that genetics took over my life:)
- sometimes, i was just exhausted. especially when it came to those darn flies.
- The amount of work for class was a lot to deal with.
- i think the format of the class made learning the material a lot harder than it should have been.
- at times i felt very overwhelmed with this class. i also wish that the classes would have been smaller, although this may not have been possible. sometimes i think when the teachers know you on a more individual level
- Lab reports are too much Too time consuming at times (felt like I was doing work only for Genetics and neglecting my other classes.
- Understanding the concepts of genetics.
- The Fly Lab.
- I just wish I had gotten the chance to know more people. There's this stigma about "science" people being cold, and unhelpful. In some ways I feel like we were a family, but in others I didn't really get a "we're in this together type feeling"
- I think genetics class has been the most difficult class I've taken in my life. I feel that such excessive work is unnecessary. I feel as if I have become bitter as a result of constantly doing Genetics work. Five hours to spend on one test is ridiculous in my opinion.

31. BradAdvice

- I think that there needs to be some way of confirmation of problem set answers. I was not aware of this e-mail method...perhaps that should be emphasized in the future
- Lighten up a little...I often felt that I was bothering Brad if I came to him for a couple of questions. I respect him for his hard work and dedication to his project and I wish him all of the best in the future.
- nope
- good luck next year
- Thanks for everything. You have been an awesome professor. I don't think I would have made it through without your help.
- good job!
- Thanks for always being available for help sessions, I sorely needed them.
- I really liked his style of teaching, and he seemed very approachable.
- i followed you the easiest. you were very clear and understandable.

- let students finish asking their questions before you start to answer them! but in general, thank you so much for all of your help and guidance.
- nope
- Good luck with your baby.
- Found enthusiasm to be a huge asset
- Both you and Jeff did an excellent job teaching this course....it was my favorite course that i have ever taken at U of R....I thank the two of you for the unique approach to genetics and the time and effort you put into teaching it...I know that it will be helpful for all of us in the long-run
- Great lecturer. I know this is picky and you can take this as you like, but I would have liked for you to learn my name.
- not sure why but i found your lectures more helpful
- no
- your dedication to genetics is amazing, i mean, you were at our review session the day your wife was suppose to go into labor! crazy! I don't think UR knows what they are giving up.
- Thank you so much for all the extra-help sessions!!!! I have learned so much.
- I hope that this class is just as hard next year as it was this year because i want the future students to suffer through it like i had too.
- Good work, I liked how you taught very well.

32. JeffAdvice

- Thanks for all of your help and good luck to you in the future.
- in lecture...lecture more than asking questions because we don't know the answer most of the time and that is why we are in lecture...to learn the information.
- good luck next year
- Thanks for the help on the poster. I think making us sit in the first three rows made us a closer class.
- good job!
- Web notes should be shorter.
- See the comments to Brad...thanks for being there.
- I think sometimes Jeff was a little confusing because he assumed you understood concepts even when you didn't. I really think he is an excellent professor, however.
- very helpful outside of class. it would be nice if you could speak a little louder and move a little faster to cover more material.
- remember our names!
- nope
- No.
- I don't particularly like being made to sit in the very front rows. It's easier to see the screen when you're not sitting right up on it.

- as i just said to Brad: Both of you did an excellent job teaching this course....it was my favorite course that i have ever taken at U of R....I thank the two of you for the unique approach to genetics and the time and effort you put into teaching it...I know that it will be helpful for all of us in the long-run
- Jeff, I liked your style overall.
- i liked the really extensive notes and alternative explanations in them
- no
- your dedication to our class has amazed me and i think UR is stupid for losing you as a teacher, you are one of the best i've seen here
- Smile more :) Thank you also for having an open door and being willing to help outside of class.
- sometimes the notes you layed out were a little harder to understand, often wordy and a bit confusing. also, your teaching was more effective say, in problem sessions when there was less people and specific questions could be asked.
- Make yourself easier to approach and try to explain things on a level easier for the student to understand.

33. PaulaAdvice

- you are amazing, thanks!
- I never got to know Paula, but keep on keepin' on.
- i think you are great! you helped me get through this course. i really enjoyed lab!
- nope
- you were very helpful and kind when i needed help with lab related stuff even though i was not in your lab
- You are the sweetest person and a great teacher. Thanks for being there :-)
- good job!
- Paula was so understanding and helpful... very straight forward
- she was the best lab teacher that i have ever had...never gave up until she was absolutley sure that we understood. and i had so much fun with her
- You rock!!! Often you were the only bright light in this course and kept me from pulling my hair out. :)
- Thanks for all of your help... i don;t think that i would have made it through! (this is not sarcastic)
- She was a great lab instructor and extremely helpful with any questions I had about lab, genetics in general, and even other questions about topics such as graduate schools and research. I think she is a fabulous professor!!!
- extremely helpful and receptive for help outside of class
- nope
- No.
- I just would like to say that Paula is the BEST lab instructor i have ever had. i called her at home, i e-mailed her, i stopped by her office at many random times, and she was ALWAYS

ready to help. Thank you so so much. I really understood all we did a lot better due to how much you care about your students. You are a wonderful teacher, and i really enjoyed having you this semester (and will enjoy having you next semester too! :))

- You are WONDERFUL! I have never had such a wonderful lab professor - you explained things terrifically and I felt much better about labs iwht you.
- paula was a great lab teacher, she made lab very bearable.
- She is one of the best instructors I have ever had and I felt very comfortable approaching her with questions and problems and she explained things in a manner in which I understood
- I really appreciated the help that you gave me even though I was not in your lab section.
- Dr. Lessem was amazing. I basically based my schedule next semester around her lab times. She genuinely cares about students and is a great professor.
- i liked the concern and double checking that we knew what was going on, also availability for help outside lab was good
- keep up the good work
- if i had to pick another mother, you would be it, you are so understanding and caring about the students its amazing
- YOU ARE MY GENETICS SAVIOR!
- Thank you so much for taking an interest in all of us (not just related to our genetics work!!!)
- wow, you were wonderful!! i don't think i would have passed lab without all your help!

Thank you so much for all the help you have given throughout the semester. YOu always made a point to make sure that everyone understood what was going on.

34. MiscComments

- Make this class just as challenging intellectually, but less demanding. It is a huge load to handle and I think cutting down on the lab work would make the class less time consuming.
- n/a
- y'all put in so much effort into this course, and it was a pleasure to be taught by teachers who are so devoted to their students.
- I am sorry that classes below me will not get the opportunity to have you all as their professors. They will be missing out on a wonderful experience. Good luck in whatever you decide to do and thank you so much for your dedication and help.
- WOW...I am glad that I have survived this semester. I have never encountered a class this hard, and I don't think I will again. It made me think, it challenged me, and sometimes for the good even though I don't want to admit it. I learned a lot although there is no way I would want to do it again! Thanks for your dedication as teachers though, you guys were great!
- I'm glad that this class is over, but I definitely feel I benefitted from it significantly. Also, thank you to Brad, Jeff, and Dr. Lessem for putting so much effort into this class and making it a great experience for all the students who took it!
- nope
- i have no idea how feasible this is within the structure of the bio major, but i think it would be wonderful if this were a year long course in order to have another semester to go deeper into

the material and cover more topics. like i said, i have no idea if that's even a possibility, but i thought i'd throw that out there.

- you guys put a ton of work into this class and demand a ton out of it.
- the course should remain equally as challenging, but there should be less work involved.
- I think that this exit questionnaire is a perfect example of how the work load in this class is a bit excessive. I understand the benefits for you as teachers, and for the next class, but it does a great job of illustrating the extremely large time commitment compared to other courses.
- Thanks for making this one of my most satisfying semesters ever, I don't think anyone realizes how much you teach us not only about genetics, but about life